



SOME OBSERVATIONS ON THE REPORT OF THE ROYAL COMMISSION
ON LONDON TRAFFIC.

WITH SPECIAL REFERENCE TO THE PROPOSED FORMATION OF NEW
THOROUGHFARES.

By PAUL WATERHOUSE, M.A. Oxon. [F.].

Read before the Royal Institute of British Architects, Monday, 21st May 1906.

THE Report of the Traffic Commission deals exhaustively with many aspects of a very large subject—the difficulty of locomotion in London.

As Londoners we have an interest and a concern in the entire problem; but it is not my intention on this occasion to deal with more than one side of so vast a theme. When I received the invitation of our Council to produce a Paper on the Commission's Report I ventured to assume that what was required of me was an architect's view of the architectural aspects of a subject which, though not strictly architectural, has a strong bearing on the architectural future, and for that matter on the architectural past, of our metropolis.

My attention, as you will assume, has centred chiefly on the proposal of the Commission that the traffic congestion of London should be relieved by certain alterations of existing streets, and notably by the construction of two new thoroughfares: one traversing the town from north to south, the other linking Bayswater with Whitechapel. The architectural problems connected with these new streets might, I think, be briefly put in the form of three questions, the discussion of which will form the substance of the Paper which I am offering for your consideration, not by any means as a final answer to these questions, but merely as the setting forth of a particular view of the difficulties of the case and of certain possible solutions.

The questions are: (1) Granting the necessity for two new thoroughfares more or less in the localities selected by the Commission, what attempt, if any, should be made to control the architectural treatment of the new buildings which will form their frontages?

(2) What relations should these new roads bear to existing roads, streets, and squares?

(3) What shall be their effect as regards the destruction and retention of existing buildings of value or interest?

It will be obvious as we work into this subject that my three questions cannot be treated separately or in order. We are dealing with the putting of new wine into old bottles (always a difficult and dangerous business), and there is hardly a single enigma in this most enigmatic subject which does not involve the raising and if possible the answering of all three of my questions simultaneously. Again, every portion of the problem, even if it be viewed from the

purely utilitarian point of view, presents in its settlement a choice of evils—a choice so embarrassing that were we not certain of the evils of the *status in quo*, we should with one accord cry out that it were better to leave things as they are than to attempt to face so great a conflict of interests which in reality are not utilitarian only but supremely æsthetic and supremely social. We must indeed set out on this question not with the high and fervent hope of turning our old London into some new perfection—too much newness would, in fact, be to most of us a bar to perfection—we can only hope to stumble on some compromise which shall, while securing improved locomotion, add a certain dignity to uncomely places, and steal as little as possible of our pleasure in things old and long loved.

May I at this point make a grateful acknowledgment? I am, I believe, entitled to call myself a Londoner; but I felt from the moment that I began seriously to enter into the subject of this Paper that I should do well to summon the assistance and collaboration of some one whose knowledge of London buildings was more extensive than my own, and I have felt myself fortunate in having at my elbow the help of Mr. F. Herbert Mansford, a man who has lived from infancy not merely in London, but for many years in the heart of the city, and whose knowledge of and interest in the streets, houses, and churches of the metropolis are both intimate and enthusiastic. In the preparation of my illustrations and in the working out of the suggestions and criticisms which I am about to lay before you, his assistance has been of the greatest possible value.

Perhaps we shall do well at this stage to set before us the Commission's plan of the proposed new streets [Illustration No. I.]. It is fair to observe that the Commissioners, who adopt these streets as part of the recommendation of their advisory board, put forward the plan with a distinct reservation. "The precise route," says the Report, "which these avenues should follow is not definitely fixed, and would have to be laid out when the time for construction comes."

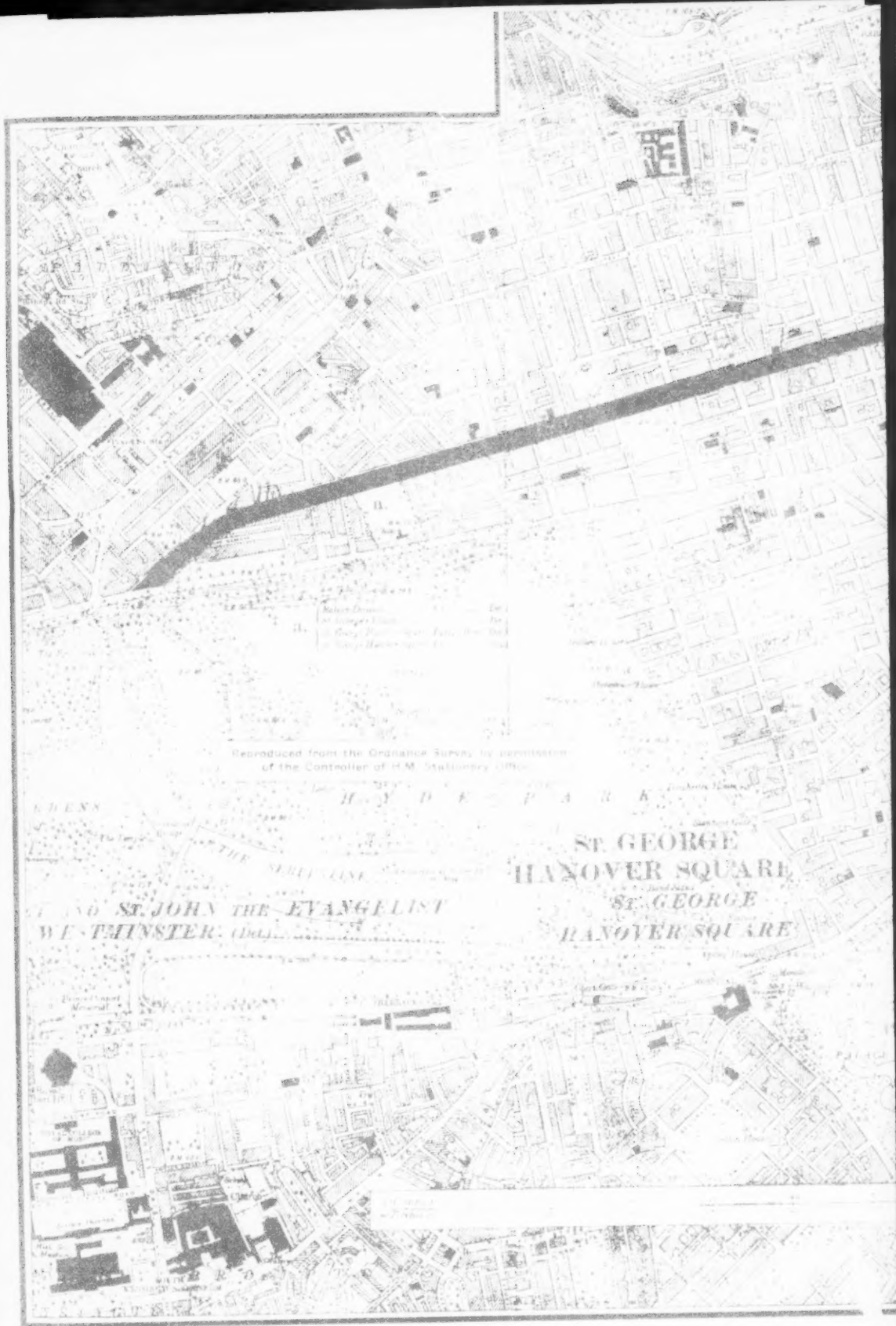
The first part of this sentence not only leaves us free to express criticism on the lines of route suggested, but even seems to invite some suggestions as to improvement. The second clause, one may remark in passing, is a dangerous one; it savours too much of that old and evil spirit which has led in the past to haphazard street planning, to ungainly intersections, and generally to costly and abortive achievements in which the waste of money has been only equalled by the absence of art. Why, when at last an attempt has been made to apply forethought to this ancient and vital problem, should we admit that anything so important as the line of the largest pair of streets in London can be put off till "the time for construction comes"? One word more before we look into the details of the Commissioners' plan. The impression that a reader of the Blue-book derives from its perusal is that the Commissioners are tramway mad. This is not wholly their own fault. Tramways, it is true, seem to permeate every portion of their deliberations, and to affect all their decisions; but we must remember that these tramways were distinctly set before the Commission as a dominant feature in the problem. In fact the terms of the inquiry with which the thirteen Commissioners were charged by their Sovereign are as follows: they were to report—

(a) As to the measures which the Commission deem most effectual for the improvement of locomotion and transport by the development and interconnection of railways and tramways on or below the surface; by increasing the facilities for other forms of mechanical locomotion; by better provision for the organisation and regulation of vehicular and pedestrian traffic or otherwise.

(b) As to the desirability of establishing some authority and tribunal to which all schemes of railway or tramway construction of a local character should be referred, and the powers which it would be advisable to confer on such a body.







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H. Y. D. E. P. A. R. K.

ST. GEORGE
HANOVER SQUARE
ST. GEORGE
HANOVER SQUARE

ST. JOHN THE EVANGELIST
WESTMINSTER





NSBURY

STRAND

LONDON

Waterloo Station

TRANSCRIPT OF

PROPOSED NEW

ATTACHED

REPORT OF THE ROYAL COMM



PT OF THE PLAN OF
ED NEW AVENUES
ATTACHED TO THE
COMMISSION ON LONDON TRAFFIC

PAUL WATERHOUSE.

MAY, 1906.



PLAN I.





THE CITY OF LONDON AND THE BOROUGH OF SOUTHWICK

Now the Commission was issued in February 1903, and the Commissioners signed their Report in June 1905. The motor omnibus, by this time familiar to our eyes, was perhaps scarcely a practical factor in street locomotion at the earlier date; and though we may feel considerable astonishment that a commission of traffic experts should pay such little heed to this important invention as merely to say of it what they write in clause 100 of their Report, it is certainly a fact that the eleven months which have passed since the Report was framed have supplied evidence of the efficacy and commercial success of the motor omnibus which was not wholly available a year ago, and which would, if the Commissioners were reporting to-day, assuredly reverse the decision that "tramways will continue to be the most efficient and the cheapest means of street conveyance."

This is not the place in which to discuss a question of locomotion, which for that matter has been well handled elsewhere; I merely allude to it as affecting in two points our own architectural problem. In the first place we shall have certain objections to raise against the direction and position chosen for portions of the new avenues, objections which, unless circumstances had changed since the Report was framed, would have been at once met by the rejoinder that the Commissioners' choice as to position and direction was regulated by the location of existing lines of tramway. Under the altered conditions our criticisms and suggestions may have added weight. Secondly, the width recommended for the new main avenues, viz. 140 feet, is obviously an outcome of the proposal that, in addition to underground tramways or railways, each avenue should be encumbered—I can use no other word—with four lines of surface tramways. It is possible that if the surface lines were given up or adopted on a less extensive scale a less width, say 100 feet, would be acceptable. Great width in streets is not an unmixed advantage, either from a practical or from an æsthetic point of view.

And now to return to the Commissioners' plan. As issued with the Report its intentions are not very clear. Town maps, as this audience knows, are necessarily of two kinds—those in which everything is drawn to scale, and those on which for purposes of additional clearness for special purposes the width of the roads and streets is exaggerated; in fact, drawn out of scale. The map of which the Commissioners have made use is one of the latter kind; it is therefore evident that in order to give reasonable attention to the considerations with which we are here concerned we must transfer the problem to a survey which is in all respects drawn strictly to scale. This is, in fact, what I have done, and I present for your consideration not the Commissioners' authentic plan, but my own interpretation, drawn to true scale, of the Commissioners' intentions.

It will be observed that the west-to-east avenue is intended to strike north-eastward from Hyde Park at a point adjoining Victoria Gate, forming at that point a continuation of the Bayswater Road, which it is intended to widen all the way from Shepherd's Bush Station. Without wishing to dwell on minor difficulties at the outset of this route, I would remark (on a purely unarchitectural point) that an oblique junction in two very important thoroughfares produces great difficulties to drivers—difficulties which can be experienced any day by anyone who cares to ride a cycle westward past Apsley House. (A reference to Illustration II. will show how by a slight deviation this can be overcome.)

I here mention, but I do not press, the suggestion that if the new avenue were started further west it might adopt, perhaps without alteration of width, the line of Lancaster Gate. No special obstacles beset the route for some distance beyond the start except the necessity for deciding a knotty problem—which will need to be faced in many sections of these new avenues—whether in adopting the line of an existing street the widening should be effected by the abolition of the existing buildings on both sides, or by the pulling down of one side only,

leaving the remaining frontage to form the building line of the new street. This question will generally be answered by the character of the existing buildings, and in the case of Connaught Street, which is the first with which we have to deal, I am tempted to recommend the destruction of both sides, so that Hyde Park Square, which is not greatly in excess of the required width, may indicate the axis of the first straight length. At Connaught Square one would appropriate the north portion of the garden, leaving the south of the square intact; and in Portman and Manchester Squares the new street would follow respectively the north and south sides. All goes fairly well till we get to Langham Place, the junction of Regent Street and Portland Place, where the first test of conscience for architects begins. What is to happen to All Souls' Church, which lies fair in the line of route? I am very fully aware that many good judges of architecture would say, "Down with it." For my own part I have an affection for its unusual yet familiar tower, and could bear to see it stranded upon an island round which the traffic should circle [Illustration IV., p. 380]. The Queen's Hall would have to go, it is true, but the loss to architecture is one from which we should recover—the loss to music is one that would easily be met by the erection of a new hall, and the gain to traffic would be immense. Concert nights there are a terror to the police. The formation of a circular roadway round the church would give opportunity for the change of direction which for two reasons I should like to see introduced at this point. In the first place, the rapacious avenue, having blasted the fame of Nash, was heading for Middlesex Hospital, and would have bisected and vivisected it, before proceeding to dash across Tottenham Court Road and take Bloomsbury askew, an act of geometrical indelicacy which the rectangular propriety of the district would certainly resent.

Let me say a word here on the general subject of direction. Straightness—unswerving aim from point to point—is in itself a desirable quality in our new streets. It makes obviously for speed; it makes also for economy if the line of direction runs parallel to the existing streets among which the new streets run. That a bit of straight street has its own elements of beauty we must admit. I hope that there will be many straight stretches in these new avenues when we get them. But there are beauties too in well-arranged curves and bends which where they occur naturally as outcome of the necessities of the case we shall not merely tolerate but cherish. And even a change of axis introduced without the intervention of a curve may be necessary, and need not be ugly. But there are two rules which I think we can safely make. One is not to pass the front or flank of any important public building obliquely if it can possibly be helped; and, secondly, not to cut obliquely across the general trend of street plan in any district unless the district is one of inconsiderable streets, or unless the necessity of getting from place to place diagonally is an essential necessity. We are now approaching an incident which exemplifies these points. The Commissioners' suggestion for negotiating Russell Square is at least awkward; so also is the destruction they would work by ploughing at a very acute angle through the intervening streets. Apart from the wanton cost of such "cutting on the bias," the process results in the formation of a host of those sharp-nosed corner lots which are the disgrace of London already. Bloomsbury, to put the matter clearly, is not square with Marylebone. We have got to "tack" somehow before we get to Russell Square, and what is more, if we do so tack, we have a chance of parading with some dignity past the new north front (as yet unborn) of the British Museum. Let us leave Bedford Square untouched and aim as nearly as circumstances permit for the centre of Russell Square. We shall thus pass parallel to the Museum, and give it incidentally the opportunity of standing back from the road with at least some degree of retirement.* The process to which I refer as "tacking," whether it be accomplished by a curve or by mere

* On my large scale plan I have indicated the prolongation of Torrington Square already, I believe, contemplated by the Duke of Bedford.

inclination, should be performed among property of the less costly kind and among streets where the obliquity would not be unduly disastrous. All Souls' Church being the first important point at which I offer for consideration a route alternative to that of the Commission, I may here draw attention to the fact that, while indicating the Commissioners' avenues by a thick black line, I emphasise my own suggestions by blacking in the houses, whether old or new, which would form the new frontages. [See Illustrations II. and III.]

Shall I observe that, in passing through East Marylebone, I have not forgotten the claims of the churches of St. Andrew* and All Saints? The avenue, it seems, can glide between them. Also it would, if my revised route were adopted, cross Berners Street so nearly at right angles as to offer no undue disregard to the frontage of the Middlesex Hospital.

By this time some one will, I am sure, have resolved to attack both the Commissioners and me on the subject of the reckless absorption of square gardens, of which we have already, in imagination, passed through five. My defence is ready. In the first place, the loss of air-space caused by such intrusion will be *nil*; we are occupying the ground we absorb not by inhabited buildings, but by houseless space, and in any case the avenues themselves, where they pass through places other than squares, will be substantial additions to the breathing ducts of London. Secondly, I propose, as you will observe, that at certain points in the routes new open spaces should be formed, some of which might compensate the only persons who would have a real grievance—the key-holders of the semi-private square gardens.

I would also urge, in defence, that to pass through two such regions as Marylebone and Bloomsbury without invading a certain number of squares is literally impossible. My suggestion, therefore, for a deviation in some portions of the routes does not desecrate the squares any more than would be the case if the scheme of the Commissioners were to be adopted without any modification.

We have now got back to the Commissioners' line of march, and have travelled through Russell Square, about which I have more to say later on. With your permission, we will consider ourselves opposite the Foundling Hospital, past which again I insist on going parallel (though the Commissioners are, at least, very uncertain on this point), and we are rapidly approaching contact with the great north and south avenue, which is, to my mind, the feature of the Commissioners' scheme which most lays itself open to friendly criticism. If we assume, for the moment, that the official lines are accepted, then I would point out that the abrupt changes of level which characterise Mount Pleasant lend themselves admirably to what is undoubtedly desirable at the intersection of two such gigantic roads, namely an "over-and-under" or viaduct treatment; and the road to go under in this case is, I think, that running east and west.

Of the rest of the route through Clerkenwell I have not very much to say. That the new Post Office Buildings should be passed at an oblique angle is, I fear, inevitable. Again, we must be careful of St. John's Church and of the dignified parish church of St. James. Careful, again, of the Charterhouse, for the projected line of march comes dangerously near a mutilation of them all. There is, however, at the eastern end of this avenue, a problem which, in the deliberations of the Commissioners, has hardly received the attention it deserves. The objective towards which the Commissioners are working at this point is, of course, trams in the first instance—the trams of Whitechapel Road and the trams of Commercial Road; but they are very properly intent, at the same time, on picking up *en route* that gigantic tidal wave of double traffic which is concentrated at the two contiguous stations of Liverpool Street and Broad Street. But the cost at which this would be done appears to me unnecessarily

* It is not as architecture that I save St. Andrew's.

large. The plunge through the Finsbury district, cutting through Finsbury Pavement House and the site of the displaced Roman Catholic church, involves the destruction of a mass of very costly new buildings and the mutilation of an attractive formation of frontage—the curve of Finsbury Circus—which seem likely to result in a very heavy expenditure, not sufficiently balanced by compensating advantages. Is it not at least worth while to suggest that the avenue, instead of passing along the south of the two stations, should cross the rails at a point north of the station buildings, where a road bridge already exists? If this proposal were adopted, the avenue would connect with Whitechapel Road and Commercial Road at the same point as intended by the Commission; but it would fall in from a more northerly direction, and would face the end of Leman Street.

We are not primarily concerned with the *traffic* problem here, but it may be remarked that my alternative suggestion, so far from hindering traffic, would probably be of great advantage. The traffic to and from Liverpool Street Station will necessarily continue to be largely in the direction of the Bank—a line of traffic which would be hindered rather than helped by being *crossed* at the entrance of the station by the new avenue.

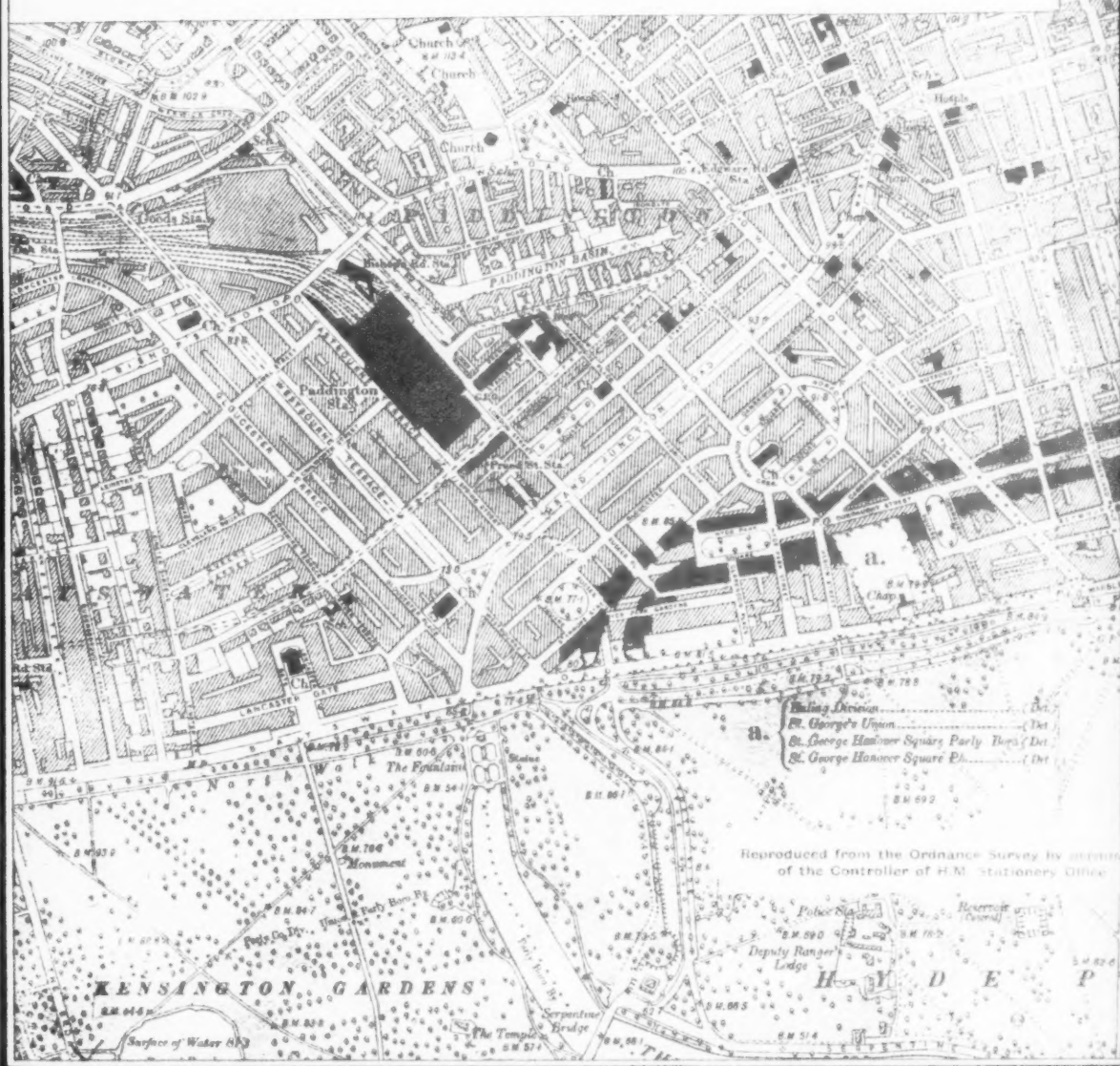
It is of the north and south avenue that I wish to speak with the greater urgency. Not that I am urgent about its northern end. We are, perhaps, most of us indifferent to the architectural events which occur north of the Pentonville Road. Whether the Caledonian Road should be widened on the east side or on the west side, or on both sides, is not an architectural question that presses. Except, indeed, that we may offer the suggestion that a destruction on both sides offers the chance of improvement, neither frontage being at present worthy to stand unashamed in a street wider than Portland Place. The new Baths and Washhouses are, it is true, some bar to widening on the west side; and though Pentonville Prison stands well back on the east side, there is, unhappily, a new block just north of the prison that might prove a difficulty. The Pentonville Road could, owing to existing gradients, be carried as a viaduct over the new road. I mention these factors in passing, only to conclude eventually that the entire route should be changed. As one follows the proposed course of this new road south of the Pentonville Road, one wonders at its choice of locality, until it is realised that the true secret of the whole manœuvre is, once more, trams. If one grants that trams are the only means of cheap locomotion, the dead end of the Gray's Inn Road trams at Holborn certainly becomes a blot on the traffic system; and, looking at the matter from this point of view, there is much to excuse, in theory at least, the line of route suggested, even though it places half a mile of new avenue between the northern part of Gray's Inn Road and King's Cross Road—two thoroughly efficient thoroughfares blocked, not by their own, but by cross traffic. It is south of Theobald's Road that the difficulties thicken. The first difficulty is how to widen Gray's Inn Road. No man of right feeling would consent to its being widened on the Gray's Inn side. It must therefore, it seems, be widened on the east. This proceeding may be simplified by the fact that there is a second-hand Town Hall for sale on the east side; but it goes far to increase the obstacles that lie in our way when we get to Holborn—obstacles so determined and so obdurate that I am bold enough, as I have already hinted, to advocate a complete change of policy as regards the north and south route.

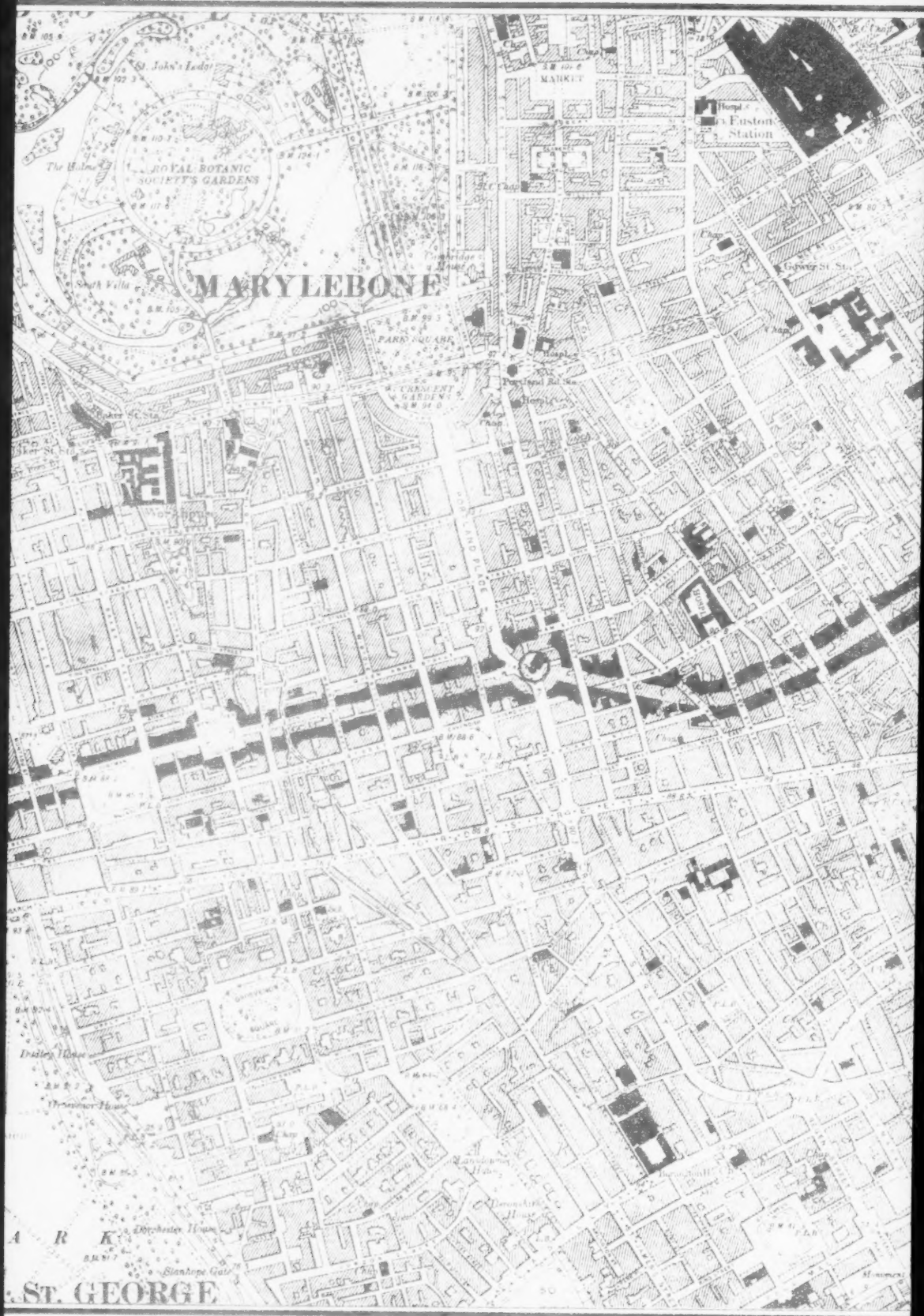
The object which meets the view of the southward passenger as he alights from his tramcar in Gray's Inn Road is nothing less than the gabled front of Staple Inn. A continuation of Gray's Inn Road towards the river would mean a destruction of that last relic of old London's countenance, such a destruction as I, for one, would withstand to the uttermost.* To burrow beneath it would, no doubt, be possible, though difficult, and on emerging from

* And behind Staple Inn lies another obstacle, the Patent Office.

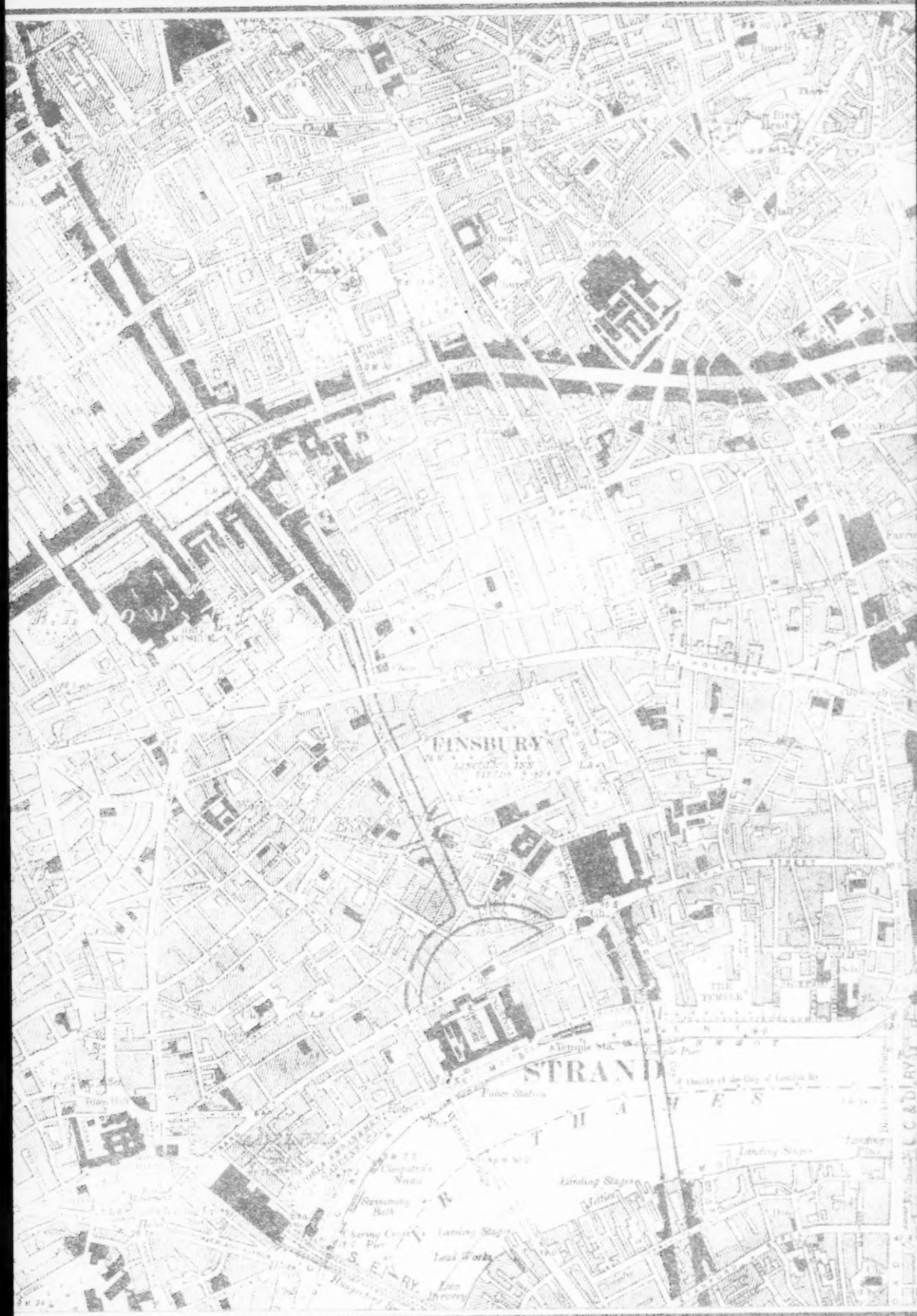
THE EAST AND WEST AVENUE

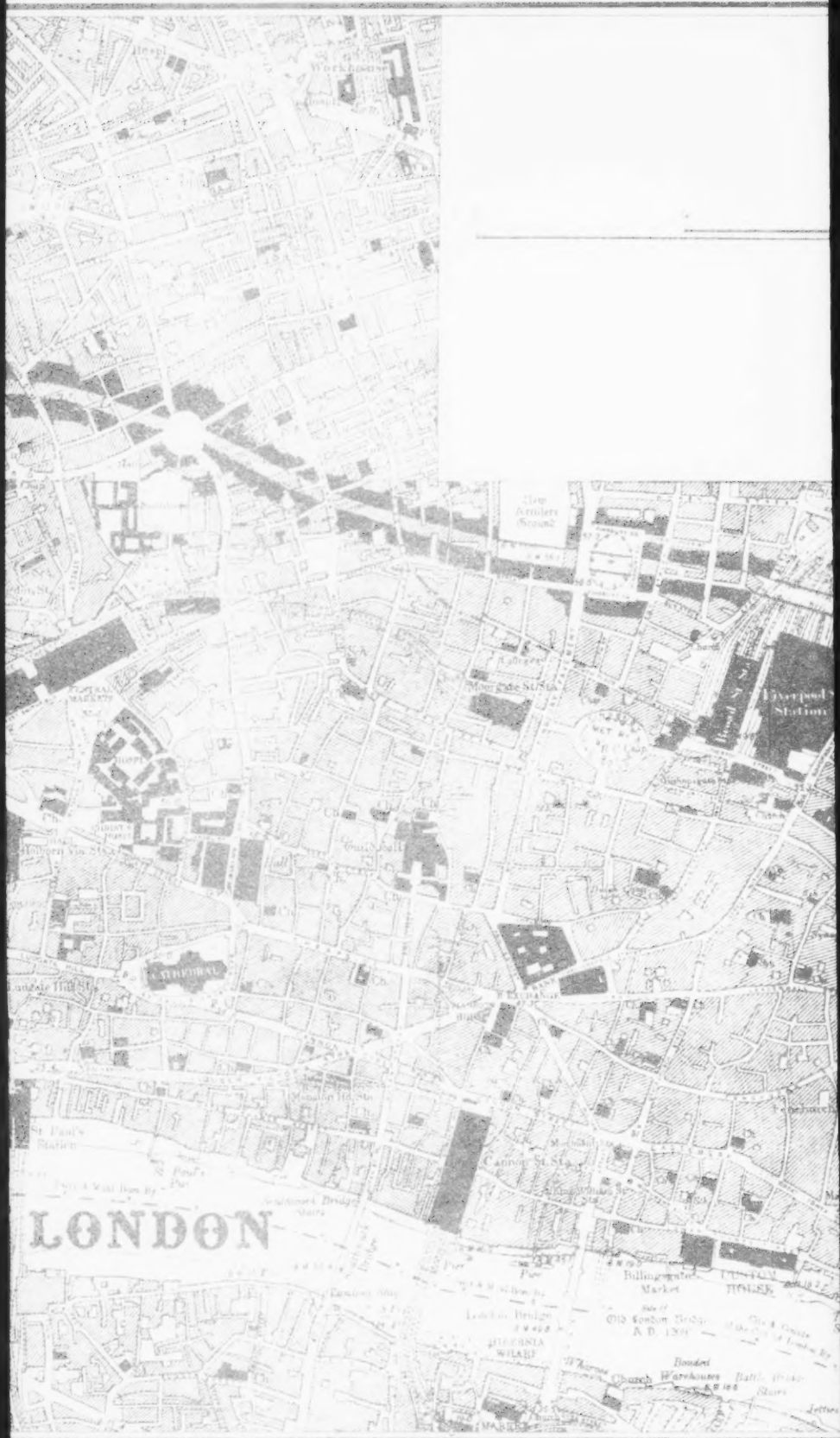
PLAN SHEWING A PROPOSED MODIFICATION OF THE ROUTE
LAID DOWN BY THE TRAFFIC COMMISSION.











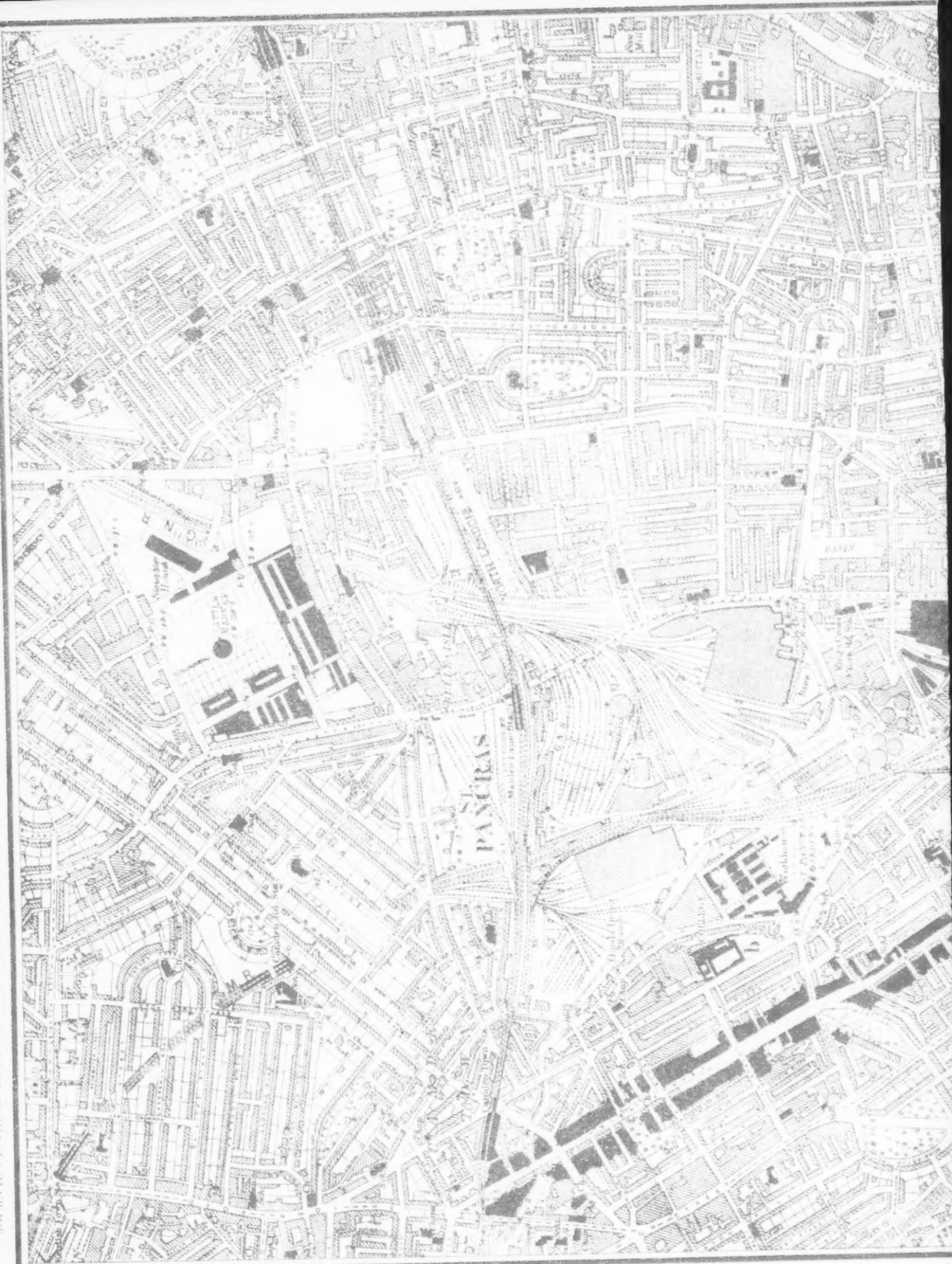
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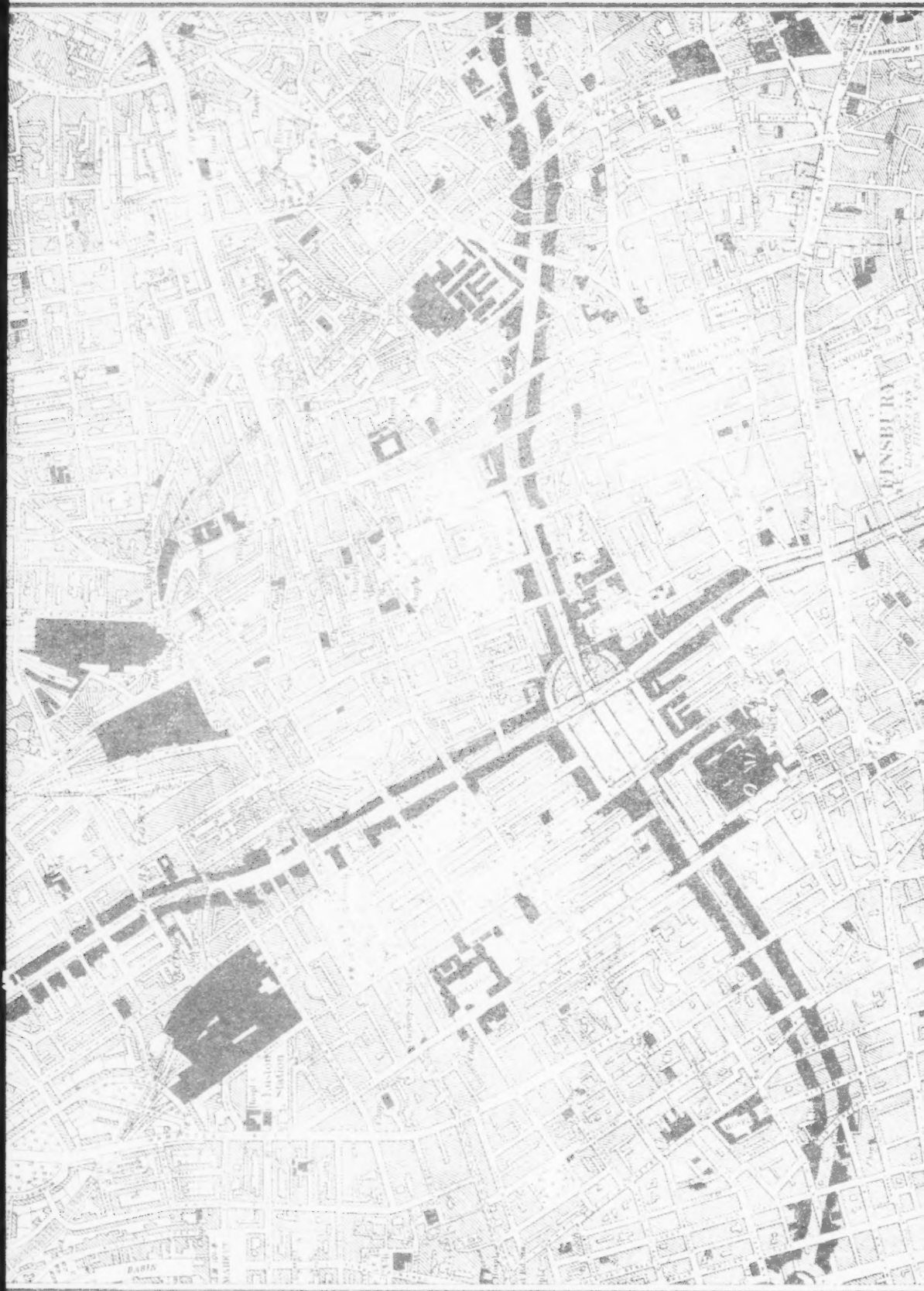
PAUL WATERHOUSE.

MAY, 1906.

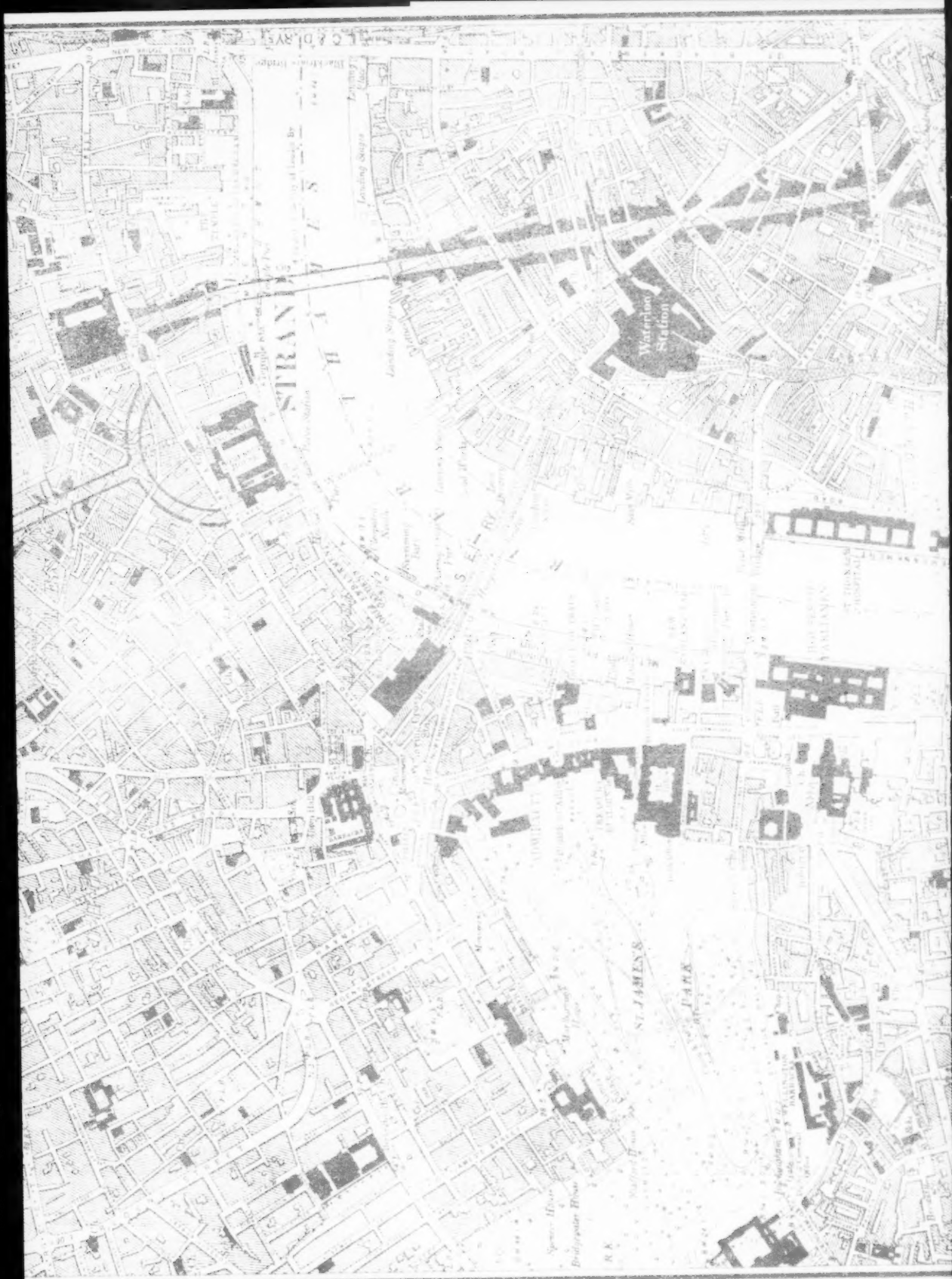














THE NORTH AND SOUTH AVENUE

PLAN SHEWING A PROPOSED MODIFICATION OF THE ROUTE SUGGESTED BY
THE TRAFFIC COMMISSION.

SCALE.



PAUL WATERHOUSE

MAY, 1906.

below ground, though the tunnel would have got us over the difficulty of crossing Holborn, we should find ourselves knocking a large chip off the back of the Record Office, and, once free of that, we should have to face the wrath of the benchers of the Temple. I know what my friend Mr. Simpson would suggest.* He would say, Why cross Holborn *directly* at all? Very good; but there are difficulties again. If Chancery Lane be adopted as the line, how are we to widen it? We cannot and dare not steal from Lincoln's Inn. On the east is that troublesome Record Office again; and even if we were to attempt to work obliquely, by taking something off the east at the top and something off the west at the bottom, so to speak, we should have to sacrifice the new buildings of the Incorporated Law Society, which I feel sure we should regret. Again, let us suppose that fire has destroyed Staple Inn, or that Lincoln's Inn has suffered from earthquake, or even that the authorities of the Record Office request that they may be housed in some more beautiful structure. These interventions of Providence, of calamity, or of grace would, after all, only land us at Fleet Street; and I do not see how we are to get thence to the Embankment without some unpardonable intrusion on the Temple. It is true that a route might be found (by diversion) to the east of the Temple; but, after all, what are we aiming at? We want to cross the river as nearly as possible midway between Blackfriars Bridge and Waterloo Bridge, and such a diversion would clearly take us much nearer the former than is at all desirable.

The solution of these difficulties which I venture to lay before you (and it is a solution in which my collaborator Mr. Mansford has more real share than I have) is that we should look to the Kingsway and Aldwych for help. Assuming that the Temple Pier is the point at or near which we want our new bridge to cross the river, why should we not strike a nearly straight line for a magnificent street running from the great entrance of the Law Courts to the dome of the Bethlem Hospital? This street would, of course, be treated as regards level in the same way as Waterloo Bridge Road. That is to say, it would not descend to the level of the Embankment, but retaining the high level secured at the Fleet Street or Strand end, it would pass over the Embankment Road, and would only descend on the south side of the river in time to pass comfortably under the railway lines near Waterloo Junction Station. It would, in fact, pass over Commercial Road, which would only need to be slightly dipped, and getting level with Stamford Street would pursue the existing roadway levels under the railway. I said "nearly" straight, because a straight line would take us through the School Board offices of the London County Council. I have my fears lest the deviation necessary to avoid this obstacle may imperil the pretty little Astor building, so perhaps we had better leave this question till the Education Act is passed! Who knows what it may result in?

It is, of course, partly by way of architectural pomp that I make this road aim for the Bedlam dome at one end, and for the new Law Courts doorway at the other, but the south end is sufficiently near the "Elephant," which, of course, is the southern haven of the Commissioners, and the junction with the Strand is, as you will understand, intended as an approximation to the eastern horn of Aldwych. From Aldwych northward our avenue is ready made to Theobald's Road, and thence the bargain already effected between the London County Council and the Duke of Bedford, for the widening of Southampton Row, seems to suggest that the avenue should take that line. In any case we have found a way back to Russell Square, and I can now talk of the subject which I abandoned when we visited it before on our eastward journey.

Let us boldly realise that the intersection of our two big avenues will be in a sense the

* I allude to Mr. John W. Simpson's very able Paper read at this Institute in April of last year, which, with

Professor Pite's companion Paper, is a most valuable contribution to the serious study of the art of street creation.

most important street centre in London. It is essential that it should be an over-and-under intersection, an engineering feat which if steep gradients are to be avoided must influence, as far as levels are concerned, some hundred yards of roadway on each side of the intersection. Six or seven years ago it would have been vandalism to suggest such desecration as an alteration in Russell Square, but now Russell Square is already transfigured beyond all recognition. Even those sides of the square which have not been pulled down have been violated by a treatment which I can only describe by the use of a most horrible term. They have been "brought up to date" with a trimming of terra-cotta. So we are free to look upon Russell Square as being by this time rather a space than an architectural paradise. It is nearly a furlong across, and if it were possible to acquire for our important public purpose enough land to extend the open space about 350 feet eastward, we should be able to minimise the inconvenience of the changes of level by making the intersection, so to speak, in the open. Imagine that we have an available space 700 feet wide and 1,100 feet long; let us assume that a difference of road level of 30 feet is required for the crossing; then, with a gradient of 1 in 16, the east and west road could pass under the north and south road without any rise on the part of the north and south road at all, and without any change of level outside the boundaries of the square. 1 in 16 is of course a good deal too steep for our purpose; but it will be understood that a little rise in the north and south road, and a little gradient in the new avenues outside the square, would result in a perfectly easy two-level intersection.* Then, lest we should be accused of robbing Bloomsbury of its best breathing-space, let us agree to leave the open ground free of building. If the cutting and the viaduct were to meet one another, not in a huddle of shops, but in an open pleasance,

* It will be observed that as a matter of fact I do not suggest that the intersection should be in the middle of the open space, but considerably to the east of the middle. Even so I reckon that a gradient of 1 in 17 (in each avenue) would effect the necessary variation of level

without any change of gradient outside the open space; consequently to make the gradient quite comfortable it would be desirable to extend the slope about 100 yards beyond the square except on the west side.

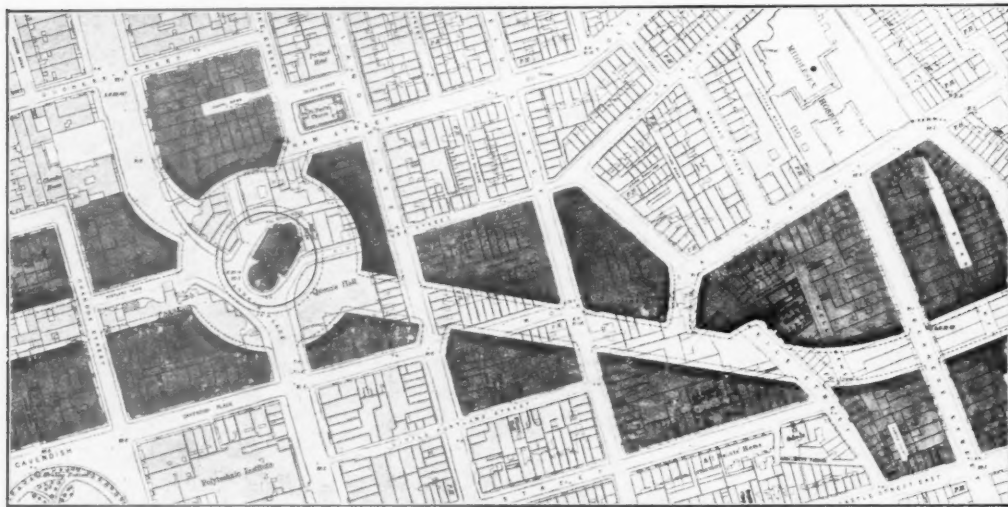


ILLUSTRATION IV.—PORTION OF MR. WATERHOUSE'S SCHEME ADJOINING ALL SOULS' CHURCH.

Scale about 16 inches to the mile.

full of grass and green trees (and nearly all the best of the present noble trees would be undisturbed), we should have saved our consciences by giving back the stolen garden ground, and we should avoid a world of architectural worry over the problem, which sometimes, I admit, bears good fruit—the problem of the building with two front doors, one 30 feet above the other; and the still worse problem of the houses next it which cannot have doors in both streets, and consequently have several stories of unlighted basements built up against the embankments. In giving 30 feet as the distance in height between the upper and the lower roadway at the intersection, I have been guided by the dimensions of the Holborn Viaduct, and have merely added a few feet of height for the improvement of the effect. Each roadway, it should be remembered, will have beneath it an underground railway. Of course, if it were necessary for the railway of the north and south avenue to cross over the roadway of the east and west avenue, we should have to arrange a greater height of viaduct increased by the height of the railway tubes. But as this would involve not merely an unsightly bridge but also an increase of gradient in the roadways, I conclude that the railways might very properly do their crossing entirely below ground. There would naturally be an important junction station at this new centre of London traffic, and consequently the nearer the two lines are to one another in level the better.

It happens that there already exists on part of the ground which the scheme proposes to appropriate the new Russell Square station of the Great Northern, Piccadilly and Brompton Railway. The disarrangement of this station would be more than compensated by the connection of the line with the new proposed system, and the gain to the public from this point of contact with another railway route would be yet another argument in favour of the scheme I here propose.

North of Russell Square the line of route, though apparently simple, is in reality beset by a bewildering choice of alternatives. For many reasons the simplest course would be to continue the line of Woburn Place—effecting the widening on the west side—so as to avoid injury to St. Pancras Church, and taking beyond the Euston Road the track of Seymour Street which has already been adopted by motor omnibuses. There would be no doubt a little difficulty in getting past the south-east corner of Euston Station (unless, indeed, the road were to be narrowed at this point), but the route would be a good one, unless we can find a better. And I venture to think that the one I here offer is in some respects an improvement.

Let me say before passing on that I have set aside with reluctance the temptation to call for the destruction of the Euston Hotel so that the avenue might steer straight for the great Doric tetrastyle behind it, which I still look upon with reverence as one of the best things in London, and which in its present crowded position is rather foolish than dignified. It would form a most imposing goal for the apparent termination of the avenue, which would at that point in the open ground of Euston Square branch to the right (or perhaps both right and left) for its journey further north. But I only suggest this, and withdraw the suggestion regretfully, feeling that it is beyond the range of reasonable demand. The proposal would, of course, involve issuing from the middle of Russell Square, not from the east side.

Again, let us ask what are we aiming for, and what can we find in the way of ready-made material to help us on our way? Assuming that the Commissioners are right in their idea that Upper Holloway is the district with which connection must be made, it seems obvious that the Camden Road is an existing thoroughfare of which advantage should be taken. It has already a fine roadway, and the houses for about a mile are set back from the road. Again, if the "Nag's Head," Holloway, is an important goal, the "Britannia," with its Hampstead and Highgate connection, is at least as important, and I may claim that by

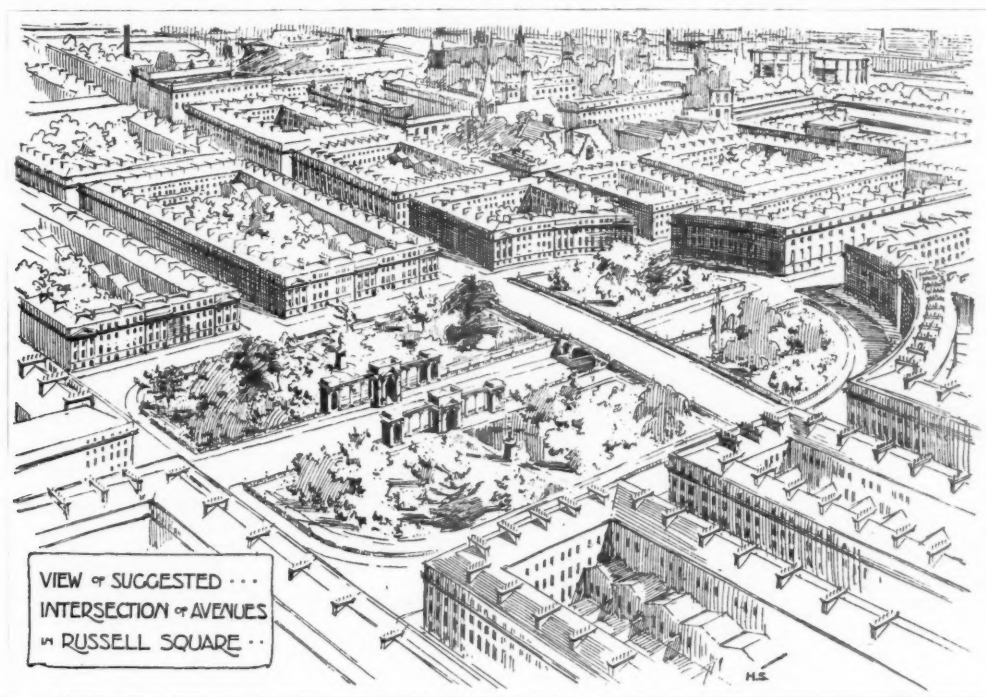


ILLUSTRATION VI.

carrying the avenue up to my proposed termination near Camden Town Station, I have not only brought it within touch of a ready-made avenue to Holloway, but have put it into a position from which connection can at once be made with Highgate and Hampstead trams, and in the future avenues could be prolonged thence to either or both of these places.

So much for our termination. Let us now get back to Russell Square again. [See Illustrations V. and VI.] You will see that in my plan I propose to issue from the square, apparently in defiance of all my principles, at a somewhat oblique angle, and that in so doing I violate (again apparently) the rectitude of Bloomsbury, and, worse still, the formality of my landscape-gardening on what, I fear, is the site of a flourishing hotel. But the case is not so black as it looks on paper.

In the first place the east-and-west road cannot proceed from Russell Square on the direct axis, otherwise it would conflict unduly with the line of Guilford Street, which I think it well to observe; in the second place, there lies east of Tavistock Square a desert, which is partly covered with dreary, cat-haunted grass, and partly by the still more dreary derelict houses of the Burton Crescent region. I have little doubt that this tract is being dedicated by the owner to improvement, and it therefore seems well fitted for our purposes. For some providential reason (not true orientation) St. Pancras Church stands somewhat awry with its present surroundings, and would find itself almost perfectly square with the new avenue if it were carried, as I now propose, past its east end. The obliquity of the viaduct in Russell Square is the effect, and not the cause, of the line of route I here propose, but incidentally it will be noticed that this obliquity helps the effective junction of the Guilford Street avenue,

and the employment of a semicircular formation at the east end of the great open space helps to cover the effect of twist.

I claim for my new route that it performs its purpose with more dignity, at less cost, and with far fuller efficiency than the Holloway to Elephant route of the Commissioners. It collects traffic from Euston, King's Cross, and St. Pancras stations with much more impartiality than theirs. It uses a mile and a half of existing roadway almost unaltered (in Camden Road and Kingsway) and it avoids a mass of interference with sentimental and other interests by abandoning the hopeless attempt to get from Holborn Bars direct to the river. Do what you will, there must be a tide of important traffic on the line of Southampton Row, a stream which my route would serve far better than any more easterly substitute.

When I said at the outset that our inquiry nearly resolved itself into three questions, I put first of the three the question of architectural design in the streets themselves. In the course of our study this question has only been incidentally answered. We cannot leave the subject without facing it more definitely and without attempting to make up our minds on the counteracting claims of individualism and collectivism. In other words, shall these new streets be built up house by house, each structure following the whim of its owner and the wit of his architect, or shall we attempt a policy of collective design in which whole blocks, or many series of blocks, are the units of the composition? For my own part I feel no doubt about the right course to adopt. Even if it were possible and desirable to make the whole of these two avenues perfectly straight and formal I should deprecate the attempt to insist upon uniformity of design on a large scale. We have, it is true, examples in London of whole streets in which the requirements or fancies of individual owners have been subordinated (in the original design) to a united intention on the part of the designer. I allude, of course, especially to such buildings as those of Portland Place and Regent Street, but experience has proved that in recent years the attempt to dispose of valuable frontage sites under conditions which debar the free exercise of personal architectural wishes and commercial requirements are not very successful. Further it may be said that individualism in street architecture is in London by no means unsuccessful, and that the atmosphere of our city, which, in spite of the Prime Minister's recent offer to clarify it, is likely to remain somewhat less brilliant than that of Italy, renders ineffectual that long-drawn straightness and uniformity which in continental cities have an intrinsic merit.

A straight street of great length and rigid homogeneity is wasted in London. A series of slight curves or obliquities which bring into view first one side and then another of the street may so far from marring the architectural effect actually enhance it, and in such streets a wealth of concentrated rival successes is apt to produce a richer architectural whole than an infinite longitude of classic purity hurrying to catch a vanishing point. Of course there are portions of our street scheme of the future which no sane man would entrust to caprice. I take it that, if (I won't say my scheme, but) a scheme similar to mine were eventually adopted certain points would be selected as demanding homogeneous and continuous design. The first departure by a quadrant from the Bayswater Road, the All Souls' circle, the "place" opposite the British Museum, Russell Square, the bridge over the Thames and the viaduct over the Embankment with their immediate approaches would necessarily be committed each to an architect (not necessarily all to one man) for continuous connected treatment.

I take it that the proposed Traffic Board would necessarily have an architectural side to its functions. Architecture was perhaps properly unrepresented on the Royal Commission; but it obviously cannot be ignored in the machinery which is the outcome of that Commission if any outcome is to be. The Traffic Board must certainly have as one of its chief duties the safeguarding and promoting of a concrete and definite plan of street improvement—must in

fact adopt the Commissioners' plan or a better one and stick to it—and it is obvious that such a course of action can only be carried out in consultation with some man or body of men who are architectural artists in the best sense.

I suggest, as a reasonable and practical course, that there be appointed an architectural adviser to the Board (or, if preferred, three architectural assessors). That the architectural adviser should not himself design any portion of the new streets, unless it be in the matter of bare plan. That for each building centre demanding continuous treatment a separate architect should be appointed; and that on no consideration whatever should individual licence on the part of lessees or purchasers be allowed to prevail within the boundaries of such prescribed portions. Finally, that on all other parts of the new frontages perfect liberty of design and choice of architect should be allowed, subject to the control of the Board's architectural assessor or assessors, who should have absolute powers of censorship over all designs submitted.

The proposals of the Commissioners for the improvement of streets are by no means confined to the two new avenues. It is not my wish here to deal with more than one of their other suggestions, otherwise my paper would be unduly prolonged. They will all be seen marked on the Commissioners' own plan, which I have exhibited on the screen. I merely wish to draw attention for a few moments to the projected device for crossing Piccadilly. It consists, as you will see, of a roadway to be driven through the grounds and under the building of Devonshire House, out of Berkeley Square to the Green Park, and thence along the west front of Bridgewater House, Spencer House, and the other buildings that line the Park. The road would, of course, pass under Piccadilly, which would become, at this point of crossing, a viaduct. The scheme is certainly a tempting one, but, I should think, terribly costly. Certainly, it destroys but one house in its course; * but would there not be great difficulty as to the public rights in the Park and the private rights of these majestic palaces which have hitherto abutted upon it?

I have long cherished a hope for a picturesque rearrangement of the top of St. James's, whereby it would pass under Piccadilly and join a widened Albemarle Street, which, if it were prolonged northward to Bruton Street, would pick up the cross-traffic from Conduit Street, as well as relieving that terrible bottle-neck opposite Long's Hotel. The softening of the steep hill of St. James's would be a great gain to horses, and the view of the Palace under the Piccadilly bridge would be superb. But this scheme, though fascinating, is, I know, full of difficulties, and I give it up.

Let me put forward one alternative. That new Park avenue that leads to nowhere from the Queen Victoria Memorial, if it is legitimate to trespass on the Park at all, why should it not serve a useful end? Let it plunge under a Piccadilly viaduct, and find its way boldly into the throttled maze of Curzon Street. It would do a fine work in relieving traffic.

The folk who now drive down St. James's out of Albemarle Street are going either to Victoria or to Westminster. In the future the Westminster travellers would be able (on the abolition of the Duke of York's steps) to drive down Waterloo Place, and the passengers for Victoria might pass Buckingham Palace by the new route which I here suggest. Thus the present crush of cabs waiting to get from Albemarle Street to St. James's would be relieved.

I have finished my brief dip into this vast subject. I want to say in conclusion that in setting forward my own ideas on the scheme I make no pretence of being wiser than the

* I see that the Advisory Board reckon that Devonshire House would not be destroyed, but would only be affected by "a part of the roadway" coming underneath it. The plan shows the roadway as making straight for

the centre of the house; and if it is to *tunnel* beneath it and beneath Piccadilly the tunnel would surely be an unduly long one.

united wisdom of the Commissioners; still less do I wish to have it thought that I look upon my alternative suggestion as being free of difficulties. Indeed, I admit that while my route saves certain buildings which the Commissioners would ignore or annihilate, it destroys some (all modern) which expediency may elect to save. My object in putting forward a scheme at all is very simply explained. Of our Council's choice, not mine, I was bidden to read a Paper on the Report; criticism of such a document can, I think, only be useful if it is constructive, not merely destructive; therefore I have felt driven to lay before you my ideas on the subject. And this I do with the request that you will not class me with the gentlemen who are for ever pressing their personal hobbies as to improvements upon an uninterested public, or with those who periodically write to *The Times*—putting plenty of letters after their names—to suggest, for example, that Hyde Park Corner should change places with the Marble Arch, or that Nelson's Column should be decked in luminous paint.

DISCUSSION OF THE FOREGOING PAPER.

SIR JOHN TAYLOR, K.C.B., *Vice-President*, in the Chair.

SIR R. MELVILL BEACHCROFT, who rose at the instance of the Chairman, said he considered it a great privilege to move a vote of thanks to Mr. Waterhouse for his exceedingly interesting Paper. He thought himself about the last person in the room who ought to undertake such a task, for he had no special knowledge of the subject. He was, however, an original member of the London County Council, having been a member for over seventeen years, and had had the privilege of serving on the Improvements Committee of that body during the period when the great scheme from Holborn to the Strand was under final consideration. He also remembered some thirty-four years ago having had something to do with opposing a scheme for carrying a new thoroughfare from the Marble Arch to Whitechapel which was brought before the then Metropolitan Board of Works, with the suggestion that that Board should contribute a million and a half towards the scheme, which was to cost from three to four millions. The Metropolitan Board of Works did not see their way to make that contribution. They opposed the scheme and the Bill was withdrawn. He had listened to the Paper, which had been delivered in so interesting, instructive, and amusing a manner, with the greatest possible pleasure. Mr. Waterhouse asked what we were aiming for. Well, he supposed we were hoping that some scheme of the kind he suggested might one day be possible; but Mr. Waterhouse had said nothing about the question of pounds, shillings, and pence. He had merely put it to them that, in anticipation of the recommendation of the Royal Commission being given effect to, it was desirable—and he quite agreed with him—that the architects should be beforehand and consider the architectural effect of any scheme proposed. Speaking merely as a poor, overburdened payer of rates and taxes in London, and having heard mention of something like twenty-five

millions as the least cost that would be involved, he was afraid they would have to wait some time before they would see a scheme of the kind proposed carried out. He agreed with Mr. Waterhouse that the Report of the Royal Commissioners had gone rather mad on tramways. He thought they were counting a little bit without their chickens in assuming that tramways were going to occupy the whole of the main streets of London. He thought that the motor-buses, of which they had heard so much—and smelt so much—although at present in an inchoate and infantile state, would in a few years, if not months, show a very different complexion, and, as regards cross traffic at all events, would in future meet all the wants of the day. With regard to the Traffic Board Bill mentioned by Mr. Waterhouse, he had heard only that day that the Government were opposing it, and he was afraid therefore the chance of the Bill passing into law was very remote. The Bill was not favoured, for instance, by Mr. John Burns, who, he noticed, expressed his opinion in the *Pall Mall Gazette* of this month that “the only one fault in the Report is the recommendation to institute an Advisory Board.” “Such a Board” (wrote Mr. Burns) “already exists: its headquarters are at Spring Gardens, its achievements are seen around in the 500 road and street improvements which have been formed and completed by the County Council during the past 18 years.” Although a member of that body he could not help saying that he agreed with what the Royal Commissioners suggested in their Report, namely, that if there was to be a Board it ought to be an independent Board. If the London County Council liked to give up its trade and municipal enterprises, its steamboats and house building, then he would say by all means let the Council be the advisory body. But a great central body could not well supervise and administer. He agreed with Mr. Waterhouse

that the question of the architectural treatment of all new streets of London was a matter of vital and imminent importance to London. They had no Architectural Minister, no æsthetic authority whatever in London, to guide and direct the London County Council, or anybody else. When they made new streets, their architecture and plan were always left to the chapter of accidents. He attached great importance to what Mr. Waterhouse said about the undue width of streets. Anything over 100 feet might well be, not only a detriment, but even a danger to traffic. How Mr. Waterhouse in his plan of new streets had managed to glide through London in the way he had done, avoiding this church and that, and working in the squares, was quite a marvel to him. He had done it in a manner that was most successful, and it certainly differed from the method adopted by Mr. Frederick Harrison when he was devising his scheme for the new roadway from Holborn to the Strand. Mr. Harrison simply took his ruler and ruled a couple of lines from Holborn to the Strand, and said, "That is to be our new street." That plan had been carried out, and Mr. Harrison had never ceased to congratulate himself on the result of that achievement. Possibly he was right, but it was not a course which could often be taken in devising a new thoroughfare. One word with regard to tramways: these had hitherto naturally followed what might be called radial lines. The difficulty was to connect these radial lines by cross or belt lines, and this was a feature which those who had to deal with the problem had to consider, and must be borne in mind in laying out any new thoroughfares. If the Council was given sufficient power and a sufficient lease of life, say another ten years, this great proposal of Mr. Waterhouse, which they all welcomed, might possibly see fruition.

SIR GEORGE C. T. BARTLEY, K.C.B., said he had been asked to second the vote of thanks. He was a visitor, and he supposed the only reason he had been invited was that he was a member of the Commission criticised in the Paper. He would not enter at any length upon the subject, but it should be remembered that the subject the Commission had before them was the traffic and not the architecture of London. Of course the question of the proper architecture to be employed in the new streets must at once arise, and it showed the enormous difficulties of the traffic problem when one subject ran into another, and when the architecture, for instance, was closely allied to the consideration of the use of the streets for traffic. He should like to say, however, that the conclusion that the Royal Commission had adopted these great thoroughfares was a little premature. They had an Advisory Board, and the Advisory Board did recommend these thoroughfares. Their proposals were not detailed in the careful way in which Mr. Waterhouse had prepared the plan; they were merely block outlines of a

scheme. But the Report of the Commission itself was hardly bold enough to adopt these great thoroughfares. He had been in the unfortunate position of the dissentient voice on the Commission because he did accept them, and considered that the only solution for the traffic of London was in the creation of some large new streets running east and west, and north and south. He felt that the time had come—he felt it during the inquiry, and he felt it very strongly now—when the traffic of London should be met by at least two large thoroughfares such as had been discussed that evening. The enormous increase in the traffic, multiplied by fivefold every ten or fifteen years, which was proved before the Commission, showed that it was impossible by any detailed alteration, such as many of the schemes which were put forward implied, practically to solve this question, which ought to be solved, say, for a century. It was a subject that one would never solve in one sense, because the changes of a nation went on, and a hundred years hence there might be things even better than motors which would provide the facilities required, and which might require, their special arrangements for their development. The subject of trams had been referred to, and he should like to defend the Commission from the statement that they had gone mad upon trams. Certain evidence before the Commission did undoubtedly suggest that some people were quite mad upon that subject; for one witness wanted a tram up Lombard Street; and another had the audacity to suggest what he might almost call the sacrilege of a tram cutting across Hyde Park. In his own supplementary report he thought even a year ago when he wrote it that they must be very careful, and wait and see whether motor omnibuses would not do even more than the trams. The fact that they did not move on rigid lines was an enormous advantage in narrow streets; therefore he hoped they would be so successful, when they got rid of the noise and the smell, that they would really supersede many of the trams. But it must be remembered, in considering this great question, that the problem was the rapid locomotion of people for business purposes. That was, after all, the great question the Commission were asked to consider, and, to his mind, the avenues proposed led to a solution. The one east and west was by far the more important of the two, for it could be made a means of running the great lines of railway that came from all parts of London and all parts outside of London right to the City. Even if trams might be superseded, or motor omnibuses might take the place of many trams, still he thought that, as they proposed, a subway under those great thoroughfares for tramways or light railways would be an enormous advantage in bringing the thousands, the tens of thousands, the hundreds of thousands, of people that came from all the suburbs of London every day to

the City. As regards the proposed Traffic Board and the exercise of authority over architecture, which he thought most important and specially interesting to the present gathering, he should resent in every way (unfortunately he had not a seat in the House of Commons now, and he could not say much) the London County Council being the authority, as he feared they might be. To begin with, they had quite enough to do in their commercial undertakings, and more than they should do; but it must be remembered that, after all, the area that the London County Council covered was but a fraction of that which was concerned in the locomotion of London. The locomotion of London consisted not only in the district within the police area of London, but for many miles round, and it was becoming larger and larger every year, with motor-trams, railways, and so on. Therefore it would be monstrously unfair to make the London County Council the judge, and the jury for that matter, on those points when they had areas like Middlesex, Surrey, Essex, Hertford, all intimately connected with this great problem, but which were not to have any voice in the matter. There was no doubt that the tribunal ought to be an absolutely impartial one, appointed by the Government of the day, and independent altogether of local bodies. He had had very great pleasure in listening to the Paper: it had raised questions which of course were not specially before the Commission, and which they had not reported upon. He fully agreed, however, in its great importance, and he could only hope that if these great thoroughfares were made they would make London even more beautiful than she is. He was a Cockney himself, and he was proud of London. He heartily agreed with Mr. Waterhouse that to have absolutely straight streets, as they had in New York and other great American cities, was not the pleasantest form of architectural feature. He thought turns and bends enhanced beauty, and it was certainly less fatiguing to walk along curves than down very straight streets. He was sure that if the architects of England, and London especially, would look to this and keep their attention strictly upon it, these great thoroughfares would be pressed forward, and would be a means of making London, as it should be, not only commodious for traffic, but a fine architectural city, as of late years they had shown they were desirous it should be. He had great pleasure in seconding the vote of thanks.

Mr. H. HEATHCOTE STATHAM [*F.*] said he had very great pleasure in supporting the vote of thanks for this most interesting, and, as another speaker had already observed, amusing Paper. Nobody succeeded better than Mr. Waterhouse in putting things in an interesting manner. He was, however, a little sorry to hear him rather sum up against the idea of symmetry in the architectural treatment of these great streets, though he noticed that he recommended sym-

metry at certain points. It was a remark of a late novelist, Mr. Grant Allen, that Paris was a city, and London was a collection of villages. If they wanted a city to look like a city, it seemed to him that its great thoroughfares ought to be treated with a certain degree of architectural symmetry. He did not mean to say to make the whole thing one design from end to end, but, at all events, to divide it into blocks which might have a certain harmony with each other, though different in detail; and even in regard to a single block, like a terrace, he had always thought that the real secret in treating a terrace, in what ought to be a dignified style, was symmetry in the general design, with minor differences in detail, which did not affect the general design, but which nevertheless gave each owner a little personal interest in his own house, his own building, or whatever it was. He must say that he thought too much was made of the argument that it was difficult to let or get rid of sites and so on, unless a free hand were allowed to every individual owner. Something must be sacrificed for the public dignity of a city, and individual owners ought to be a little less selfish, and ought to consider that it was their duty to the public to give up something of their individual tastes for the sake of the general architectural effect. In Paris they were made to do so. They tried to alter some houses in the Place Vendôme, but were not allowed to do it, as it would have spoiled the architectural symmetry of the square. For a great city like London, in thoroughfares on a large scale, that was a very important point, and he should prefer that sort of symmetry to the kind of freedom of treatment Mr. Waterhouse seemed rather to recommend, more especially when it was a question of a geometrical curve or crescent. He considered that they lost the effect of a crescent when they dropped symmetry. The moment he saw the plan of the crescent road at the foot of Kingsway he said that it ought to be treated in one design; and in the competitive designs which were sent in as suggestions, he remembered that most of the competitors did treat it so. Of course it was not going to be treated so. They had lost that. But he could not help thinking that they had lost a great opportunity. In regard to the small surface round All Souls' Church, he thought that was a very good idea of making the portico and spire the centre point. He quite agreed that All Souls' Church was a building which was worth preserving; it was for its time a very clever attempt to adapt the spire to classical architecture. But in regard to circuses on at all a small scale, it must be remembered—there were a number of instances of it in London—that if they had several wide streets cutting into those circuses, they never realised to the eye that it was a circus; they lost it; and, therefore, to make them circuses was rather introducing an awkward shape

for planning houses, and it did not fulfil what the architect intended. Therefore, he said, make a circle round the church and enclose it, but keep the open space a square; it would look better and be more convenient. He particularly admired the care with which Mr. Waterhouse had, all through his Paper, tried, as he said, to dress up past monumental buildings, and also the remarks he made as to the inconvenience of joining streets obliquely through other roads and streets. That had been done in America, and they had already got plans out for rebuilding San Francisco on that scheme—laying out streets like gridirons and drawing avenues obliquely through them. They knew what the effect of that was in the illustrations in the American papers—what had been called “flat-iron” buildings at street corners. They could not have a worse form for architectural appearance, and they could not have a worse or more inconvenient form of site for planning. He had only one word more to say, as to the proposition which Mr. Waterhouse made, rather calmly, for carrying a road from Victoria across the Green Park through Devonshire House. Devonshire House was not beautiful architecture, and it was not so very old, but still it was what one called an historic London house of considerable importance, and he thought one must judge that sort of building not solely by its architectural value, but by its historic interest. He himself should think a proposition to drive a road through the middle of that house rather an act of vandalism.

MR. WATERHOUSE: It is not my idea, but the Commission's.

SIR GEORGE BARTLEY: It was a tunnel under Devonshire House. I did not, however, support that proposal.

MR. W. D. CARÖE, M.A., F.S.A. [F.] said he should just like to add a few words of thanks to Mr. Waterhouse for his very illuminating Paper. It was not often that upon a subject of this kind one was thoroughly amused and instructed at the same time. He had succeeded in doing this admirably, and making the subject most interesting. It was a great satisfaction to them all to have had Sir George Bartley present to express the point of view of the Commission itself; but he ventured to think—and he said it with great regret—it was rather illustrative of the feeling towards architecture in this country at the present moment that the Instructions to the Commission did not make the slightest reference to architecture as having any part of importance in the question of London traffic. If the Instructions to that Commission had been to deal with the traffic of London consistently with making the improvements a dignified addition to the architecture of London, he thought it would have been more on lines which they could have supported and approved of; but simply to say, Improve the traffic of London, entirely independently of all architectural conditions of dignity,

was hardly what one would find, for instance, in Paris or in Berlin. It was the case, he believed—and he had looked through the Report pretty carefully—that there was not a single reference to architecture as having even any existence in a great city; and therefore it was very advantageous that Mr. Waterhouse should have dealt with the subject, as he had done, from the architectural point of view, in which, of course, the traffic point of view was included. He would not follow in detail many of Mr. Waterhouse's points; but there was just that one point Mr. Statham had already mentioned, that of monumental buildings and symmetry through the whole course of a street of this kind, and the opposite picturesque treatment. It had often struck him that the treatment of Regent Street, by which each block between each cross street was treated as a single symmetrical block, could not possibly be improved on in such a street as this. They got there really both of those aspects; they got a sufficient amount of picturesque treatment, and they got essentially a monumental treatment. If they compared Regent Street, which, if it had been constructed in stone, he ventured to think would have been a thing they should have been proud of for ever, and should not have treated it as it had been treated—if they compared Regent Street with the Brompton Road, they would get quite a sufficient object-lesson as to which was the better treatment of the two.

PROFESSOR BERESFORD PITE [F.] said that, while adding his quota of thanks for the Paper, he hoped that the importance of the subject would lead them to prolong the discussion. Mr. Waterhouse's Paper had provided food for thought and for further discussion, and it would be valuable, apart from the importance of anything which attached to their discussion as an Institute of Architects on this most important subject. If it would be possible to continue the discussion on another occasion he would move the adjournment.

MR. E. W. HUDSON [A.] said the subject was a most important one, and this was the first time it had been considered by the Institute. He would therefore second Professor Pite's proposition.

THE CHAIRMAN consented to the adjournment, and stated that arrangements would be made for the discussion to be resumed at the meeting of the 11th June. Meanwhile, he said, they were all agreed that they were deeply indebted to Mr. Waterhouse for the immense trouble and pains he must have taken to prepare the Paper. It had been his (the Chairman's) intention to make some remarks on the subject, but he would now reserve them till the 11th June.

MR. WATERHOUSE, in briefly expressing his acknowledgments, said he felt much honoured that Sir Melvill Beachcroft and Sir George Bartley, representing as they did two such important bodies, should have taken the trouble to attend and to propose this vote of thanks.



9, CONDUIT STREET, LONDON, W., 26th May 1906.

CHRONICLE.

THE CONGRESS.

Seventh International Congress of Architects,
London, 16th to 23rd July.

Arrangements for the Congress are rapidly approaching completion, and members of the Institute intending to take part are urged to communicate with the Secretary without delay. The following are some extracts from the provisional programme which will shortly be sent to members of the Congress:—

Meeting Places of the Congress.

The headquarters of the Congress will be the Grafton Galleries, Grafton Street, W.

The Inaugural Meeting will take place at the Guildhall, E.C.

Meetings will be held both at the Grafton Galleries and the premises of the Royal Institute of British Architects, 9 Conduit Street, W., for the discussion of the subjects of the programme.

Opening Day.

The Grafton Galleries will be open at 10 o'clock on the morning of Monday, 16th July, when the President will hold an informal reception.

Badges, tickets for visits, &c., cards of invitation, will be obtainable at the Congress Bureau, Grafton Galleries.

At 11.30 there will be a meeting of the Permanent International Committee.

At 8 o'clock the Inaugural Meeting of the Congress will take place at the Guildhall, E.C., kindly placed at the disposal of the Congress by the Corporation of the City of London.

Receptions, &c.

The Royal Academy of Fine Arts will entertain the Congress at a Soirée at Burlington House.

The Right Hon. the Lord Mayor of London will entertain the Congress at a *Conversazione* at the Mansion House on the evening of Tuesday, 17th July (limited to 1,000 invitations).

The Royal Institute of British Architects will entertain the Congress at a Garden Fête at the

Royal Botanic Society's Gardens on the evening of Thursday, 19th July.

The Art Workers' Guild will entertain a small party of members on the evening of Friday, 20th July.

The Chairman and Directors of the London Exhibitions, Limited, have put 500 invitations to visit the Imperial Royal Austrian Exhibition at Earl's Court at the disposal of the Executive Committee. Application for tickets must be made at the Congress Bureau, Grafton Galleries.

The Zoological Society of London have kindly offered admission, to foreign members, to their Gardens on Sundays, 15th and 22nd July—days when they are closed to the general public—on presentation of their cards of identity.

The Royal Botanic Society have kindly offered members free admission to their Gardens during the Congress week on presentation of their cards of identity.

The Lyceum Club (for ladies) will constitute lady members of the Congress visiting London hon. members of the Club.

The Lyceum Club also kindly offers a reception to the Congress on the afternoon of Wednesday, 18th July.

The Ladies' Committee are arranging for the comfort and convenience of ladies. They will be recognisable by the Committee badge.

Visits.

A. *Hatfield*.—The seat of the Marquis of Salisbury. Tuesday, 2.30.

B. *Hampton Court Palace*.—Tuesday, 2.30. A and B are alternative visits, and will take place simultaneously.

C. *Buckingham Palace Gardens*.—By the gracious consent of His Majesty King Edward VII.; and *Westminster Abbey*. Wednesday, 2.30. Later

D. The Works of Messrs. Holloway Brothers and

E. The Potteries of Messrs. Doulton & Co. These visits D and E will take place simultaneously.

F. *Windsor Castle*.—By the gracious consent of His Majesty King Edward VII. Thursday, 2.30.

G. St. Paul's; The Temple; The Institute of Chartered Accountants; St. Bartholomew's Church, Smithfield. Thursday, 2.30. This London visit is arranged for those who do not go to Windsor; as also alternative visits:

H. Kensington Palace; Dorchester House, by the kind consent of His Excellency the American Ambassador.

J. *Oxford*.—All-day visit on Friday. Lunch in the Halls of Exeter College and Balliol College.

K. *Cambridge*.—All-day visit on Friday, alternative with Oxford. The Congress party will be received in the Senate House by the Master of Trinity as Deputy Vice-Chancellor. Lunch in the Halls of King's College and Clare College.

L. *Tower of London*.—Friday morning, for those who do not join the Oxford and Cambridge visit.

M. Victoria and Albert Museum and Royal College of Science: Sir Aston Webb's new buildings. Friday afternoon, for those who do not join the Oxford and Cambridge visit.

N. Bridgewater House. By the kind consent of the Right Hon. the Earl of Ellesmere. Saturday morning.

O. Greenwich Hospital. Saturday afternoon.

P. Houses of Parliament; The new Westminster Cathedral. Saturday afternoon, for those who do not join the Greenwich visit.

Farewell Banquet.

The farewell banquet will take place on the evening of Saturday, 21st July, at the Hôtel Cecil, at 7.30. Price of ticket (wines included) 21s. It is hoped that many distinguished persons in London will be present.

Sir Lawrence Alma-Tadema, R.A., has kindly consented to design the menu card.

Exhibitions.

There will be the following exhibitions in the Congress premises, Grafton Galleries:

An exhibition of photographs of buildings executed by living British architects.

A chronological exhibition of British architecture from the Norman Conquest (1066) to the death of Sir Charles Barry (1860).

Oil paintings and water-colour drawings of English architecture.

A few choice specimens of British furniture and silver work.

At the premises of the Architectural Association, 18 Tufton Street, Westminster, S.W., will be exhibited a selection of Viennese students' drawings arranged by Professor Otto Wagner (Vienna).

Subjects for Discussion.

The Executive Committee have received the following communications on the questions of the programme:—

1.—THE EXECUTION OF IMPORTANT GOVERNMENT AND MUNICIPAL ARCHITECTURAL WORK BY SALARIED OFFICIALS.

M. F. Blondel (France).

Society of Austrian Architects.

Gaston Trélat (France).

Oscar Simon (Société Centrale d'Architecture de Belgique).

2. ARCHITECTURAL COPYRIGHT AND THE OWNERSHIP OF DRAWINGS.

George Harmand (France).

H. H. Statham.

Gaston Trélat (France).

3.—STEEL AND REINFORCED-CONCRETE CONSTRUCTION.

(a) The general aspect of the subject.

(b) With special reference to æsthetic and hygienic considerations in the case of very high buildings.

The Joint Committee on Reinforced Concrete (England).

Herr Wilemanns (Austria).

Professor Henry Adams (England).

E. P. Goodrich (America).

Louis Cloquet (Société Centrale d'Architecture de Belgique).

Joaquim Bassegada (Spain).

Gaston Trélat (France).

4.—THE EDUCATION OF THE PUBLIC IN ARCHITECTURE.

John Belcher, A.R.A.

T. G. Jackson, R.A.

Arthur Hill.

Othmar von Leixner (Vienna).

Herr Muthesius (Berlin).

Banister F. Fletcher.

Francisco del Villars y Carmona, Manuel Vega y March, Eduardo Mercader y Saccanella (Spain).

Society of Austrian Architects.

Gaston Trélat (France).

Gaston Anciaux (Société Centrale d'Architecture de Belgique).

5.—A STATUTORY QUALIFICATION FOR ARCHITECTS.

Robert Walker.

John S. Archibald (Canada).

L. Bonnier (France).

Society of Austrian Architects.

Gaston Trélat (France).

6.—THE ARCHITECT CRAFTSMAN: HOW FAR SHOULD THE ARCHITECT RECEIVE THE THEORETICAL AND PRACTICAL TRAINING OF A CRAFTSMAN?

Reginald Blomfield, A.R.A.

Professor W. R. Lethaby.

J. M. Poupinel (France).

Fr. van Gobbelschroy (Société Centrale d'Architecture de Belgique).

Society of Austrian Architects.

Gaston Trélat (France).

7.—THE PLANNING AND LAYING-OUT OF STREETS AND OPEN SPACES IN CITIES.

Raymond Unwin.

Herr Stübgen (Germany).

E. Hénard (France).

B. Polles y Pivo, J. Majó y Ribos, M. Bertran de Quintana (Spain).

C. H. Buls (Société Centrale d'Architecture de Belgique).

Gaston Trélat (France).

8.—TO WHAT EXTENT AND IN WHAT SENSE SHOULD THE ARCHITECT HAVE CONTROL OVER OTHER ARTISTS OR CRAFTSMEN IN THE COMPLETION OF A NATIONAL OR PUBLIC BUILDING?

Sir W. B. Richardson, K.C.B., R.A.

H. P. Nénot (France).

C. B. Müller (Germany).
 Association of the Architects of Catalonia (Spain).
 Society of Austrian Architects.
 Gaston Trélat (France).

9.—THE RESPONSIBILITIES OF A GOVERNMENT
 IN THE CONSERVATION OF NATIONAL MONU-
 MENTS.

Professor G. Baldwin Brown.
 A. Besnard (France).
 Gaston Trélat (France).
 Joseph Artagas y Ramoneda (Spain).

10.—THE ORGANISATION OF PUBLIC INTER-
 NATIONAL ARCHITECTURAL COMPETITIONS.

J. Guadet.
 Society "Architectura et Amicitia" (Holland).
 Gaston Trélat (France).

The Executive Committee have also arranged for Professor Meydenbauer of Berlin to read a Paper on "Messbildverfahren" or "Photometry." A communication on this subject has also been received from M. Marcel le Tourneau of Paris.

M. Honoré Daumet (Paris) will read a communication on the Château de Saint-Germain.

Mr. Cecil Smith (Keeper of Greek and Roman Antiquities, British Museum) will read a Paper on "The Tomb of Agamemnon."

Abstracts of the Papers and communications will, if possible, be sent to members of the Congress some time before the opening day.

The New Regulation under By-law 9.

The two Special General Meetings which preceded the Ordinary Meeting for the reading of Mr. Waterhouse's Paper last Monday occupied but a very few minutes, the Resolutions moved by the Chairman, Sir John Taylor, being at once and unanimously adopted without discussion.

The Fellowship Procedure Committee, whose recommendations were in question at the first meeting, was appointed by the General Meeting of the 5th March "to consider the form of voting-papers, the method of election of Fellows, and other matters connected therewith, including any revision of the By-laws on the subject if necessary, and to report to a General Meeting as soon as possible" [JOURNAL, 10th March, p. 256]. The Committee, appointed by the same meeting, consisted of the following Fellows:—Messrs. C. H. Brodie, Max Clarke, A. W. S. Cross, T. P. Figgis, F. T. W. Goldsmith, Edwin T. Hall, Henry T. Hare, George Hubbard, and Wm. Woodward. The Special Meeting last Monday was summoned by the Council on the requisition of Messrs. Alfred W. S. Cross, Max Clarke, C. H. Brodie, George Hubbard, T. P. Figgis (Members of the Committee), Ernest George, Alfred B. Yeates, Edmund Wimperis, T. W. Cutler, Mervyn Macartney, *Fellows*, and William A. Forsyth and J. R. Best, *Associates*, with the object of submitting the

Report and Recommendations of the Committee, and the Resolutions proposed by the Council for adopting and giving effect to them.

The Committee's Recommendations were as follows:—

(1) That the Regulation under By-law 9 be amended by omitting all the words after "respective proposers," and adding the year in which the candidate was articulated, and, in the case of a candidate for Fellowship, the year in which he commenced practice; the Regulation further to state that the voting-papers shall be in the form of the papers issued for the election of the Council.

(2) That the Direction to Voters printed at the foot of the voting-paper should read as follows:—
 "1. The voter (Fellow or Associate) is to strike out IN INK the name of any candidate against whom he wishes to vote. All names not so struck out will be counted as voted for."

(3) That a notice be printed in bold type at the head of the voting-paper urging the importance of the paper's being returned.

The Chairman read the Recommendations to the Meeting and formally moved, in accordance with Recommendation 1, that the Regulation under By-law 9 be amended so as to read as follows:—
 "The voting-papers, which shall be in the form of the voting-papers issued for the election of the Council, shall state the name and address of every candidate, with the names of his respective proposers, the year in which he was articulated, and, in the case of a candidate for Fellowship, the year in which he became engaged as a principal in the practice of architecture."

The resolution was voted on and carried unanimously, as were also resolutions for the adoption of the other Recommendations.

The second Special Meeting, which was called to confirm the Resolution passed on the 7th May with reference to the extension of the present Council's term of office, was then held, and the Resolution was duly confirmed.

Modern Church Design and the Incorporated Church Building Society.

It is stated in the Annual Report of the Incorporated Church Building Society that the Society has been instrumental in aiding in the erection of no fewer than 2,482 additional new churches, and in assisting in rebuilding, enlarging, or otherwise improving the accommodation in 6,426 other churches or consecrated chapels of ease. The actual amount of money entrusted to the Society and used in making grants towards the objects named has reached £912,761. Valuable service is rendered in the work of the Society by their honorary architects who advise on the various schemes in which the aid of the Society is to be given. At the annual meeting of the Society, last week, Mr. Temple Moore, in the course of some remarks, gave some useful suggestions as to the relations which should exist between the honorary advising

architects and the architects of proposed works. The work of the advising architects, he said, might be thus defined:—To criticise and advise on plans submitted of works proposed: first, as to construction; secondly, as to convenience and suitability of arrangement; thirdly, as to architectural design; fourthly, as to restoration of ancient churches. He assumed that one of the objects of the Society was to raise the standard of design in church architecture, so that (so far as lay in their power) not only solid and suitable, but also architectural church buildings might become traditional of the work which passed through the Society's hands. It was obvious that no rules except of a general nature could be laid down on the subject of design, and hitherto the honorary advising architects had refrained from interference, except where the design had been flagrantly bad or unworthy. He felt, however, that they should no longer be content to leave the matter like that. He granted that design was indeed a matter of personal taste and preference, but there was a certain correct and appropriate feeling in design upon the broad lines of which, despite diverse personalities, their advising architects could agree. If the Society was to have any real influence towards the raising of the standard of church work in building, the hon. architects clearly must criticise the designing, and make suggestions wherever such were felt to be needed. He regretted that, generally speaking, the standard of design in the new church work brought before the Society's hon. architects was often very inferior, and did not appear to improve. Perhaps, after all, this was not very surprising, for in these days of hurry and many special architectural needs not known formerly, church design had become very largely a special branch of architecture. The busy general architect, though an able practitioner, had not the time, or, it may be, the opportunity, to devote himself seriously to this study. Therefore, he suggested that the hon. architects should, sitting as a committee for the purpose, criticise and make suggestions on the design outside the printed rules. It might be objected that his proposal would have the effect of discouraging originality or novelty in design, but he did not think so; for novelty, when good, had a certain recognisable appropriateness and fitness. It was only when it was novelty for the sake of novelty that it became a defect. He believed that in most cases architects whose training, experience, and general practice had not been in church work especially would welcome the suggestions of the Committee. In schemes for restoration there was some improvement; the great importance of the more careful preservation of their ancient churches was generally beginning to be felt, but here again they had a special branch of architecture, requiring very much experience, which did not fall in the way of all architects. He considered that the rule of the Society which gave the advising architects power to ask one or more of the members to visit

the proposed work should be more frequently exercised even in the case of less important churches. It was sometimes difficult to make any really useful suggestions by merely inspecting drawings or even photographs of the building in its actual state. In conclusion, if the hon. architects could be put into direct communication with the architects for the works, it would materially assist the good understanding between them.

The Domestic Smoke Problem.

On the initiative of Sir Henry Tanner, I.S.O. [F.], of H.M. Office of Works, the Coal Smoke Abatement Society have carried out a further and more comprehensive series of tests of fire-grates, the points to be ascertained being (1) Prevention of smoke; (2) Heating power; (3) Economy of fuel; (4) Suitability for office and household purposes. The tests took place in the new Government buildings in Great George Street, Westminster, and were conducted by a sub-committee of the Society, consisting of Dr. H. A. Des Vœux and Mr. W. H. Atkin-Berry [F.]—the latter on the nomination of the Institute—in conjunction with Sir Henry Tanner. In response to invitations, between forty and fifty grates were submitted by manufacturers, and twenty-four of these were selected for testing. The results are published in *The Lancet* for May 19. All the grates tested are fully described in the report, and the results of the various tests are given in tabular form. The committee give their findings as follows:—"As a final result of the whole of the tests the examiners find that of the grates submitted those of Messrs. J. & R. Corker, Messrs. Candy & Co., and Messrs. Hendry & Pattison (Boyd's) are the best, showing practically equal results, and that the 'Florence' (the London Warming and Ventilating Company) very nearly approximate to them." It is pointed out that all the grates were worked with the object of obtaining their utmost capacity, and not under the conditions obtaining in an ordinary room, which would generally be more variable. The fires were not allowed to burn low, therefore the amount of smoke emitted in the tests was the minimum that could be expected. *The Lancet* containing the report may be consulted in the Library.

The late Edward Salomons [F.].

By the death of Mr. Edward Salomons [F.] the Institute loses a staunch and loyal friend and a member of fifty-five years' standing. He was elected an Associate in 1851 and Fellow in 1860, and served for a time on the Institute Council. Mr. Salomons helped to found the Manchester Society of Architects, and lent all his support to the scheme for uniting the provincial Societies of Architects into one concrete body with the Institute. His own Society, of which he was twice President, was one of the first to become allied to the Institute. At the meeting last Monday,

sympathetic reference was made to his decease by the Hon. Secretary, and a vote of condolence was passed to his relatives.

Edward Salomons was born in London in 1828, and was educated in Manchester, where his father had long carried on business. He was articled to the late J. E. Grogan, and afterwards entered the office of Messrs. Bowman & Crowther. Many of the illustrations in Bowman & Crowther's *Churches of the Middle Ages* were drawn and lithographed by him. He was a water-colour artist of some merit, and his drawings of picturesque streets and buildings here and on the Continent have been exhibited in the Manchester galleries, and some of them illustrated in *The Builder*. Among his principal architectural works may be mentioned the Art Treasures Exhibition building, Manchester; Messrs. Daniel Lee & Co.'s building in Fountain Street, the Manchester and Salford Savings Bank in Booth Street, and the Prince's Theatre. He built Messrs. Agnew's Art Galleries in London and in Liverpool, a synagogue and a hospital at St. Anne's, and various private houses. He was a member of the Committee of the City Art Gallery, of the School of Art Committee, and of the joint committee for promoting a Chair of Architecture in Manchester.

Discussion on the Annual Report: Errata.

Mr. Arthur B. Plummer [F.] sends the following correction:—"In the report of the discussion on the Annual Report in the last number of the JOURNAL I am erroneously stated to have said with regard to the rejection of architects from the Newcastle district 'that they were as good as and better than any belonging to the Institute at the present time.' What I *did* say was 'that they were as good as many'—not *any*—'belonging to the Institute.'"

In the Chairman's remarks, 2nd col., p. 365, lines 6 and 7 from foot, the end of the sentence should read: "the principal came into the possession of the Institute."

REVIEWS.

DILAPIDATIONS.

A Text-book in Tabulated Form for the Use of Architects, Surveyors, &c., together with the Acts relating thereto, and Special Chapters on Ecclesiastical Dilapidations and on Fixtures. By Professor Banister Fletcher. Sixth edition revised and largely rewritten by Banister F. Fletcher and H. Phillips Fletcher. 8s. Lond. 1906. [B. T. Batsford, 94, High Holborn.]

That a book should have gone through five editions, and a sixth be required, is sufficient evidence of its popularity, and no doubt value, among the members of the architectural profession whose practice lies in this direction. The present

edition is brought up to date by the joint endeavours of Mr. Banister F. Fletcher and Mr. H. P. Fletcher, both of whom have had considerable experience in this class of text-book. There is no doubt that a short and comprehensive work on this most involved subject is of the greatest use to the young practitioner, and naturally he would turn to it to gain some information as to his fees: a point on which much valuable advice might be added in the work under consideration, both as to the amounts to be charged and from whom payment might be expected—viz. whether the lessor, or the lessee against whom a schedule is made out. Naturally either party, or both, will expect to pay as little as possible, and each will try to shift the payment on to the other. In such cases the novice will be left in a certain amount of doubt, as in most other matters connected with dilapidations; even those with the wisest heads are at times involved in legal or other trouble on behalf of their clients, no matter for which side they may be acting. An improvement in the book would be a brief account of the practice in other countries. This would be an advantage to those having to deal with cases outside the United Kingdom. It is, however, easy to be critical. One can safely say that, as now revised, the sixth edition of *Dilapidations* will repay every student who gives the time required for its careful perusal.

MAX CLARKE.

PERSPECTIVE.

Architectural Sketching and Drawing in Perspective. With Thirty-six Plates, and Chapters on the Plan and Measuring Point Methods, the Simplification of Perspective by R.'s Method, and on Figures, Foliage, &c. By H. W. Roberts. Architect. 4s. Lond. 1906. Price 7s. 6d. net. [B. T. Batsford, 94 High Holborn, W.C.]

Perspective Tables for Practical Architectural Draughtsmen, with Chapters on the Principles of Linear Perspective, the Centrolineal, and Practical Hints. With Sixty Diagrams and Photographs. By Robert F. Shearer. 8s. Edin. 1905. Price 3s. 6d. net. [A. W. Sinclair, 79 Princes Street, Edinburgh.]

Draughtsmen and architectural students who are beginners in the art of drawing in perspective will find both of these books fairly useful for getting an insight into such work.

The first book is an extension of the author's previous publication upon perspective, known as "R.'s Method," and shows more fully how R.'s perspective diagrams may be used to elucidate difficult and unusual problems, as well as apply to ordinary work. The book is also a general guide to perspective drawing, and even touches upon the artistic rendering of black and white work. Those who have found "R.'s Method" of practical assistance will naturally follow it up by obtaining the present work. For training in sketching in correct perspective the method is useful; a defect, however, is the limited selection of points of view entailed in the use of the published

diagrams, those given not being always the best for the particular work in hand. In his introduction the writer says he has found perspective employed in very few offices, and if the author's publication will help to train students to realise the appearance of their designs when seen in perspective, it will be welcome as an aid in improving architectural work.

The second book is an ingenious and interesting effort to simplify the usual difficulties experienced in making a perspective drawing by a system of mathematical scales and tables, and is more especially intended for use when the drawings are of a considerable size, and the vanishing points in consequence far apart. In his introduction the author claims that the tables are the result of many years' experience and usefulness, and are both labour-saving and time-saving.

Both books are neatly got up and fully illustrated, and are interesting contributions to the literature of perspective.

GEOFFRY LUCAS.

BUILDING CONSTRUCTION.

Cassell's Building Construction, comprising Notes on Materials, Processes, Principles, and Practice, including about 2,300 Engravings and Twelve Plates. By Professor Henry Adams, M.Inst.C.E. La. So. Lond. 1906. Price 7s. 6d. [Cassell's.]

This work, which originally appeared in weekly parts, is now published in one volume of 552 pages, printed in double columns, and containing no fewer than 2,300 illustrations reproduced from line drawings, in addition to twelve coloured plates. The wide range of subjects is dealt with in twenty-two chapters, each divided into paragraphs with distinctive headings; and an exhaustive index further facilitates ready reference. Taken as a whole, the completeness and magnitude of the work command attention, and the first impression is that a large and difficult undertaking has been carried through in a clear, concise, and workmanlike manner. Unfortunately, however, it cannot be allowed that any appreciable advance has been made on the text-books previously in use, and it shares with them many shortcomings from the architect's point of view. It is no longer desirable to approach building construction as a subject complete in itself and distinct from the greater one of architectural expression of which it is the fundamental part. Construction and design are inseparable: architecture at its noblest is good construction beautifully clothed, and to understand the methods of construction and the nature of the materials to hand is to understand the architecture of the past. The study of old work never ceases to reveal this, and the conditions of modern construction are not so entirely different as to render the isolation of the practical from the æsthetic desirable, or even possible. To treat building construction as something to be masked and hidden is at variance with

the principles which have guided great builders of all time; yet in the work under consideration there is no suggestion that it concerns itself with anything more than the unsightly skeleton; and when, by chance, it is clothed, it is in forms far from pleasing. The strength of beams and girders, the stability of walls, and the stresses in roof principals make up only a small part of what is commonly understood as building construction, and in this work less than one fifth of the whole is devoted to them; but it is here that the author is on his own ground, and has done good work which cannot fail to be appreciated.

But with brick and stone and timber it is otherwise; to take one or two instances, the sash windows shown on p. 220 and on Plate VII. are badly proportioned, and the frame is set behind a reveal which obscures nearly all the woodwork externally. Text-books have a way of showing sash windows in this manner, unmindful of the strength and beauty of the seventeenth-century models which they travesty.

Bad forms like these and the so-called Queen Anne arch on Plate IV. should not be perpetuated even in books. Many of the illustrations such as the hammer-beam roof truss, figs. 960-966, have no scale; and although the parts are carefully shown in detail not a single scantling is given, so that the drawing has no practical value whatever. Nevertheless on p. 2 the student is advised to redraw the illustrations!

The plates seem to have been inserted without any reference to the text: floors come among roofs, and brick arches among masonry. This is a trifling matter which could easily be remedied, and the plate of "Orders" inserted in the chapter on Foundations might with advantage be omitted altogether.

The last section, called "Architecture, Notes and Examples," is too full of erroneous statements and indifferent illustrations to be taken seriously, and it is doubtful whether the book as a whole is of much value to the architect, while considerable discretion should be exercised before placing it in the hands of the student of architecture.

ARTHUR STRATTON.

ALLIED SOCIETIES.

The Sheffield Society of Architects.

The annual meeting of the above Society was held in their room, Leopold Street, Sheffield, on the 17th May, Mr. E. Holmes, president, in the chair.

The treasurer's statement of accounts and the auditors' report, which showed a satisfactory increase of the balance in hand to last year, were adopted, with thanks to the auditors.

The annual report of the Council, which showed

a membership of 122, being the highest number in the Society's record, was read and adopted.

The following were elected officers for the ensuing session:—President, Mr. E. Holmes; Vice-President, Mr. W. C. Fenton; Treasurer, Mr. F. Fowler; Secretary, Mr. J. R. Wigfull [A.]; Council:—Fellows: Messrs. H. Coverdale, C. B. Flockton [F.], W. J. Hale [F.], H. L. Paterson [A.], A. E. Turnell, and J. B. Mitchell Withers [A.]; Associates: Messrs. W. G. Buck, C. F. Innocent [A.], H. I. Potter [A.].

A prize of £5 5s. for the best set of measured drawings was awarded to Mr. A. W. Kenyon. The Society's prizes for the best work in the designing class were awarded as follows:—£1 1s. to Mr. J. M. Jenkinson, and £1 11s. 6d. was equally divided between Mr. J. W. Green and Mr. G. R. Bower.

MINUTES. XIV.

SPECIAL GENERAL MEETINGS.

At a Special General Meeting summoned by the Council on the requisition of twelve Fellows, and held Monday, 21st May 1906, at 8 p.m.—Present, Sir John Taylor, K.C.B., Vice-President, in the Chair; 32 Fellows (including 13 members of the Council), 35 Associates (including 1 member of the Council), and several visitors: the Chairman announced the object of the meeting and read the recommendations of the Fellowship Procedure Committee appointed by the Institute on the 5th March 1906.

The Chairman having moved in accordance with notice, it was thereupon

RESOLVED, That the Regulation under By-law 9 be amended so as to read as follows:—"The voting-papers, which shall be in the form of the voting-papers issued for the election of the Council, shall state the name and address of every candidate, with the names of his respective proposers, the year in which he was article, and, in the case of a candidate for Fellowship, the year in which he became engaged as a principal in the practice of architecture."

It was also

RESOLVED, That the Direction to Voters printed at the foot of the voting-paper should read as follows:—"1. The voter (Fellow or Associate) is to strike out IN INK the name of any candidate against whom he wishes to vote. All names not so struck out will be counted as voted for."

It was further

RESOLVED, That a notice be printed in bold type at the head of the voting-paper urging the importance of the paper's being returned.

At a second Special General Meeting, held immediately following the above and similarly constituted, the Chairman moved, and it was thereupon

RESOLVED, That the Resolution of the Institute passed at the meeting of the 7th May be confirmed—viz. "That the President and Members of the Council for the current Session do retain office until the conclusion of the VIIIth International Congress of Architects to be held in July, and that, in order to give legal effect to this resolution, the provisions of By-law 30 affected thereby be temporarily suspended."

ORDINARY GENERAL MEETING.

At the Fourteenth General Meeting (Ordinary) of the Session 1905-06, held Monday, 21st May 1906, following the meetings above minuted and similarly constituted, the Minutes of the Meetings held 7th May 1906 [p. 372] were taken as read and signed as correct.

The Hon. Secretary announced the decease of Edward Salomons, Fellow, and it was resolved that a letter of sympathy and condolence be sent on behalf of the Institute to the relatives of the deceased.

The following candidates for membership, found by the Council to be eligible and qualified according to the Charter and By-laws, were recommended for election—viz. AS FELLOWS (40): Charles Herbert Ashworth (Dublin); Thomas Baird, Jun. (Glasgow); Andrew Balfour (Glasgow); Robert Shekleton Balfour [A. 1893, *Institute Medallist Drawings* 1892, *Pugin Student* 1894, *Tite Prizeman* 1895, *Soane Medallist* 1896]; Andrew Black (Glasgow); George Bland (Harrogate); Percival Bown (Harrogate); Walter Henry Brierley, F.S.A. (York); John Dixon Butler; John Archibald Campbell (Glasgow); Henry Edward Clifford (Glasgow); John McLean Crawford (Glasgow); Neil Campbell Duff (Glasgow); William Newton Dunn [A. 1882]; William Adam Forsyth [A. 1895]; William Venn Gough [*Class of Proficiency Vol. Arch. Exam., formerly Associate*] (Bristol); John Hamilton (Glasgow); William Cecil Hardisty (Manchester); Frederick George Hicks (Dublin); James Kennedy Hunter (Ayr, N.B.); Arthur Blomfield Jackson [A. 1891]; Richard Croft James [A. 1896] (Bristol); William Thorpe Jones (Durham); Henry Vaughan Lanchester [A. 1889, *Owen Jones Student* 1889-90]; Charles Henry Löhner [A. 1878]; Robert Stodart Lorimer [A. 1890], A.R.S.A. (Edinburgh); Robert John Macbeth (Inverness); William F. McGibbon (Glasgow); Hugh Patrick Guérin Maule, Master of the Architectural Association Day School, *Inst. Medallist (Drawings)* 1896; Robert Miller (Glasgow); Edwin Alfred Rickards; Frederick William Roberts (Taunton); George Hanson Sale (Derby); Robert Douglas Sandilands; Alexander Skirving (Glasgow); James Alfred Swan (Birmingham); John Thomson (Glasgow); William Street Wilson [A. 1882] (Durban, Natal); William Henry Wood (Newcastle-on-Tyne); Henry Thomas Wright (Newcastle-on-Tyne). AS ASSOCIATES (4): Edwin Albert Agutter [*Probationer* 1898, *Student* 1902, *Qualified for Associateship* 1905] (Pietermaritzburg, Natal); John Barr [*Qualified Special Examination* 1905] (Lindfield, New South Wales); Ashley Florian Benjamin [*Probationer* 1902, *Student* 1902, *Qualified for Associateship* 1905]; John Tallents Wynyard Brooke [*Probationer* 1898, *Student* 1901, *Qualified for Associateship* 1904] (Manchester). As HON. ASSOCIATE: Cecil Harcourt Smith, LL.D., Keeper of Greek and Roman Antiquities at the British Museum. As HON. CORRESPONDING MEMBERS (2): Joseph Theodore John Cuypers, C.E., Architect to the Cathedral of St. Bavon, Haarlem; Member of the Royal Archaeological Commission for Description of Dutch Monuments, Architect Substitute to the Royal Museum, Knight of St. Gregory the Great, and of Oranje, Nassau; Hermann Muthesius, Dr. Ing. Geheimer Regierungsrat.

A Paper by Mr. Paul Waterhouse, M.A. Oxon. [F.], entitled "SOME OBSERVATIONS ON THE REPORT OF THE ROYAL COMMISSION ON LONDON TRAFFIC: WITH SPECIAL REFERENCE TO THE PROPOSED FORMATION OF NEW THOROUGHFARES," having been read and illustrated by the author, a discussion ensued, and a vote of thanks, moved by Sir Melvill Beachcroft and seconded by Sir George Bartley, K.C.B., was passed to Mr. Waterhouse by acclamation.

On the motion of Professor Beresford Pite [F.], seconded by Mr. E. W. Hudson [A.], the debate on Mr. Waterhouse's Paper was adjourned, and it was announced that the discussion would be resumed at the meeting of the 11th June.

The proceedings then closed, and the meeting separated at 10 p.m.

